



CITY OF WEST HOLLYWOOD

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DEPARTMENT OF PUBLIC WORKS

July 23, 2012

Mr. Ivar Ridgeway
Los Angeles Regional Water Quality Control Board
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Sent Via E-mail to LAMS42012@waterboards.ca.gov
rpurdy@waterboards.ca.gov
iridgeway@waterboards.ca.gov

COMMENTS ON THE DRAFT LOS ANGELES COUNTY MS4 PERMIT CITY OF WEST HOLLYWOOD

Dear Mr. Ridgeway:

As a member of the LA Permit Group, the City of West Hollywood joins in the comments submitted to your office by that organization. In addition, the City of West Hollywood is providing the following additional comments on the Los Angeles County MS4 Permit.

1. Please update the Facility/Discharger Information for the City of West Hollywood (WDID# 4B190219001). Please replace all reference to Jan Harmon. Change the Facility Contact to: Sharon Perlstein, City Engineer, sperlstein@weho.org. The Mailing Address for the City of West Hollywood is still correct as 8300 Santa Monica Boulevard, West Hollywood, CA 90069-4314.
2. The timelines to develop new watershed management and monitoring programs are too short. The Ballona Creek Watershed Agencies have been working together for several years on the bacteria, metals and toxics TMDLs. Based on this past activity; we know a lot of lead time is required for the governing bodies to execute new Memorandums of Agreement (MOAs). This is particularly an issue because the agencies include the State of California (Caltrans), Los Angeles County, and City of Los Angeles, as well as five small cities. In addition to entering into MOA's the obligations may require securing funding, hiring consultants, etc. All of these activities take time and the timelines in the permit are short.
3. The requirements of the Outfall Based Monitoring are onerous. The Permit requires that "Storm water discharges from the MS4 shall be monitored at outfalls, manholes or in channels at the



Permittee's jurisdictional boundary." The storm drain system serving the City of West Hollywood is a network of underground pipes. There are no open channels or water bodies. The Permit does not provide a definition of "outfall." However, the Outfall Based Monitoring section uses this term to describe a program of sampling storm water at the entry and exit from a jurisdictional boundary. "Outfall" is not simply being used as a term to describe a location where a pipe discharges to an open channel or water body. Because the City of West Hollywood is surrounded on 3 sides by the City of Los Angeles and on one side by the City of Beverly Hills, the network of regional underground storm drains carries storm water flows into and out of the City of West Hollywood. In other words, the City does not have any traditional "outfalls" where storm water enters and exits the City.

For technicians to take samples from the underground storm drain system at the City of West Hollywood's borders, they will have to enter manholes during storm events, which creates significant logistic and safety issues, as the storm drain manholes are located in the middle of rain soaked arterial roadways. In the rain, technicians will need to set up traffic detours and conduct their sampling work, including compliance with Cal-OSHA safety requirements for confined space entry. Due to hydraulic grade line conditions, some storm drains flow under pressure during storms. It is unsafe to open these manholes to take samples. As such, the Outfall Based Monitoring needs to be amended to account for areas of the MS4 with no open channels or water bodies.

4. The Receiving Water Limitations Language must be amended. As written, the City can be deemed in violation of the permit, and vulnerable to costly citizen suits, even if it is acting in good faith to do everything in its power to correct exceedances. Stated differently, even though the RWQCB requires cities to implement an iterative process to improve BMPs to address exceedances, the City is still in violation of the permit during the iterative process. This was a serious defect in the last permit and it has not been remedied in this draft.

Previously, municipal storm water Permittees had understood that the receiving water limitations language in conjunction with Board Policy (WQ 99-05) established an iterative management approach *as a basis for permit compliance*. However, since the permit language does not actually say that the Permittee is in compliance while engaging in the iterative management process, a federal

court has determined that the permit violation still exists while the Permittee is taking actions to address the problem.

On July 13, 2011, the Ninth Circuit Court of Appeals in *NRDC vs. County of Los Angeles / Los Angeles County Flood Control District* found that the Defendant County had violated the receiving water limitations, despite its compliance with the iterative management process. The Court said that the obligation to not cause or contribute to a violation of receiving water limitations is separate and distinct from the obligation to participate in the iterative management process. Thus, a municipality is in violation of the permit if its discharges cause or contribute to an exceedance of a water quality standard, even while improving its management practices and control measures. This is a fundamental change in interpretation of policy. The Court's decision also contrasts sharply with the Board's own understanding as expressed in a 2002 letter from then-Chair Diamond answering questions about the 2001 MS4 Permit in which she articulated the collective understanding that a violation of the permit would occur only when a municipality fails to engage in good faith effort to implement the iterative process to correct the harm.

An MS4 permittee should not automatically be in violation of the permit if there is an exceedance; the exceedance may not have even been caused from an MS4 discharge. The permit must acknowledge that MS4 discharges are not the only source of pollutants in the water and regulate accordingly. If monitoring demonstrates that a particular compliance strategy is not working through no fault of the discharger, then the discharger must have time to identify and implement a new strategy before being held liable for water quality alterations that may be beyond its control.

To address this problem, the City recommends that the proposed CASQA language submitted by the LA Permit Group be used in lieu of the current language.

5. The final TMDL Waste Load Allocations (WLAs) do not allow compliance to be demonstrated through implementation of BMPS that provide reasonable assurances that WLAs are met. Implementing the City's storm water control measures will meet interim guidelines, which are often based on the number and thoroughness of implementation measures. But final TMDL limits require compliance with strict numerical water quality standards (effluent limits) either at the end of the pipe or in receiving waters


when final compliance is due. For many reasons, these will be difficult to meet. For instance, there can be an impact by natural sources upon bacterial levels because the Ballona Creek watershed's Del Rey Lagoon, Ballona Wetlands, and Ballona Creek Estuary are non-point sources for bacteria loading and are tributary to monitoring sites. Also, the permit proposes that if the final compliance period has already passed when the permit is adopted, that the City must submit a Time Schedule Order (TSO) setting out a compliance plan. Similar to the iterative process described above, submittal of a TSO and implementing a compliance plan does not shield the City from citizen suits, and may increase the risk of legal liability *while the City is implementing its compliance schedule*. This is a problem that needs to be addressed.

6. Lastly, while we appreciate the access and opportunity that Board staff provided to the Permittees during the time that this draft permit was under development, and the opportunity to provide input, significant issues remain unresolved and many more have become evident now that this draft permit has been released in its entirety. A forty-five day review period for a 500-page permit is hardly adequate and has not provided us enough time to fully review and digest all the interrelated parts of this permit, to consider the implications and costs of the proposal, and provide complete and comprehensive comments.

We appreciate the opportunity to provide these comments and urge the Board to review the comments provided by all of the Permittees, issue a revised draft permit, and accept additional comments on the revised draft before adopting a final permit.

Please feel free to contact me at (323) 848-6383 if you have any questions regarding the City of West Hollywood's comments.

Sincerely,


Sharon Perlstein, P.E.
City Engineer

EDMUND G. BROWN JR.
GOVERNORMATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Los Angeles Regional Water Quality Control Board**TO:** Interested Stakeholders**FROM:** Samuel Unger, P.E. *SU*
Executive Officer**DATE:** October 12, 2012**SUBJECT:** MS4 Schedule

During the Regional Board hearing for the issuance of an updated National Pollutant Discharge Elimination System (NPDES) permit for discharges from Municipal Separate Storm Sewer Systems (MS4s) in Los Angeles County on October 5, 2012, I committed to providing a schedule for issuance of key documents over the next several weeks. Board staff plans to issue key documents in accordance with the following schedule:

- Revised Tentative Draft issued for public review– by October 18;
- Response to Comments – by October 23;
- Regional Board Hearing – November 8, 2012.

Please call Mr. Ivar Ridgeway at 213-620-2150 if you have questions regarding this schedule.

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RB-AR18914

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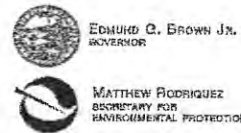
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12/13/2011 10:32 tliddell@kirklandwa.gov	Tommy Liddell
5/31/2011 16:30 tom.mitchell@pardeehomes.com	Tom Mitchell
12/15/2009 10:51 tony.barboza@latimes.com	Tony Barboza
3/23/2010 11:19 tony.pepe@csun.edu	Tony Pepe
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2/20/2012 13:01 tracy@egosciuelaw.com	Tracy Egoscue
7/6/2009 13:10 trobinson@cityoflamirada.org	Tom E. Robinson
7/6/2009 11:29 trodgers@waterboards.ca.gov	Theresa Rodgers
11/14/2011 8:33 tsmith@bonterraconsulting.com	Thomas Smith
7/6/2009 12:59 ttait@ci.arcadia.ca.us	Tom Tait
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4/3/2011 19:01 uhden@metro.net	Roger Uhden
6/17/2011 20:16 uyeda@pbworld.com	Pamela Uyeda
7/6/2009 13:42 vcastro@ci.covina.ca.us	Vivian Castro
4/11/2011 13:02 vcastro@covinaca.gov	Vivian Castro
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11/16/2011 8:39 vpeterson@malibucity.org	Vic Peterson
10/28/2010 12:38 vsalazar@ldcla.com	Victor Salazar PE
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12/29/2011 11:17	welchrc@pbworld.com	Robert Welch
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8/17/2011 11:33	wynesta@earthlink.net	Wynesta Dale
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7/6/2009 13:35	ys@cityofrh.net	Yolanta Schwartz
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Los Angeles Regional Water Quality Control Board

**NOTICE OF OPPORTUNITY FOR PUBLIC COMMENT
AND NOTICE OF ADOPTION MEETING**

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR
MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) DISCHARGES WITHIN THE
COASTAL WATERSHEDS OF LOS ANGELES COUNTY, WITH THE EXCEPTION OF
DISCHARGES ORIGINATING FROM THE CITY OF LONG BEACH
(NPDES PERMIT NO. CAS004001)**

NOTICE IS HEREBY GIVEN THAT the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) will continue the public hearing and consider adoption of a revised draft tentative National Pollutant Discharge Elimination System (NPDES) Permit for municipal separate storm sewer system (MS4) discharges within the coastal watersheds of Los Angeles County, with the exception of discharges originating from the City of Long Beach (Revised Draft Tentative Order). The Board is scheduled to continue the public hearing to consider this matter at its regularly scheduled board meeting on:

Date: Thursday, November 8, 2012
 Time: 8:00 a.m.
 Place: Southern California Association of Governments (Board Room)
 818 West 7th Street, #1200
 Los Angeles, California 90017

I. BACKGROUND

The Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities therein discharge pollutants from their MS4s, also called storm drain systems. Storm water and non-storm water enter and are conveyed through the MS4 and discharged to surface water bodies of the Los Angeles Region. These discharges are currently regulated under countywide waste discharge requirements contained in Order No. 01-182 adopted by this Board on December 13, 2001, and subsequently amended in 2006, 2007, 2009, and 2011. Order No. 01-182, which serves as an NPDES permit, has expired but remains in effect until the Los Angeles Water Board adopts a new permit. If adopted by the Los Angeles Water Board, the Revised Draft Tentative Order will supersede Order No. 01-182 upon its effective date.

A Notice of Opportunity for Public Comment and Notice of Public Hearing was circulated on June 6, 2012, advising that a Draft Tentative Order was available for public review and comment. Written comments on the Draft Tentative Order were due by 12:00 pm on July 23, 2012. A public hearing on the Draft Tentative Order was held on October 4-5, 2012.

Revisions made to the Draft Tentative Order since June 6, 2012 are the result of written and oral comments received by the Los Angeles Water Board, including oral comments made during

the public hearing held on October 4-5, 2012. The Board is expected to take action on the Revised Draft Tentative Order on November 8, 2012.

II. AVAILABILITY OF DOCUMENTS

The Revised Draft Tentative Order, with revisions made since June 6, 2012 in track changes format to assist the public in identifying the revisions, and other information and documents are posted on the Board's web site at:

http://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/index.shtml

The Fact Sheet (Attachment F) will be made available at the web site address above by October 19, 2012. Responses to written comments received on the June 6, 2012 Draft Tentative Order are expected to be made available by October 23, 2012.

These documents are also available for inspection and copying between the hours of 8:00 a.m. and 4:30 p.m. at the following address:

California Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Arrangements for file review and/or obtaining copies of documents in the administrative record may be made by calling the Los Angeles Water Board at (213) 576-6789. Appointments are encouraged so the documents can be readily available upon arrival.

III. PUBLIC COMMENTS

The written public comment period for the Draft Tentative Order circulated on June 6, 2012 closed on July 23, 2012, at 12:00 pm, in accordance with the Notice of Opportunity for Public Comment and Notice of Public Hearing dated June 6, 2012. **The Los Angeles Water Board will not be accepting additional written comments or any new evidence.**

Parties and interested persons may present oral comments. Oral comments are limited to the revisions made to the Draft Tentative Order since June 6, 2012, as reflected in track changes format in the Revised Draft Tentative Order circulated on October 18, 2012. Oral comments regarding provisions of the Revised Draft Tentative Order that remain unchanged from the Draft Tentative Order circulated on June 6, 2012 will not be accepted.

Oral comments may be limited to 3 minutes each. Parties and interested persons seeking more than 3 minutes to present oral comments must contact Mr. Ivar Ridgeway, as provided in Section VI below, no later than **12:00 pm on November 1, 2012** to request additional time. Parties and interested persons will be advised prior to the date of the hearing of the amount of time they will be allocated. That decision will be based upon the complexity and the number of issues under consideration, the extent to which the parties have coordinated, the number of parties and interested persons anticipated, the opportunity to submit written comments that are part of the administrative record, the extent to which the parties have identified unique interests, and the time available for the hearing. It is the Los Angeles Water Board's intent that reasonable requests be accommodated.

Parties and interested persons with similar concerns or opinions are encouraged to choose one representative to speak, and are encouraged to coordinate their presentations with each other. Repetitive comments will not be allowed.

IV. HEARING PROCEDURES

Except as modified in this notice, the procedures and processes established in the Notice of Opportunity for Public Comment and Notice of Public Hearing, dated June 6, 2012, also control the continued portion of the hearing.

V. EX PARTE COMMUNICATIONS PROHIBITED

Parties and interested persons are forbidden from engaging in *ex parte* communications regarding this matter with members of the Los Angeles Water Board. An *ex parte* communication is a communication not authorized in the California Government Code, to a Los Angeles Water Board member from any person, about a pending matter, that occurs in the absence of other parties and without notice and opportunity for the parties to respond. The California Government Code generally prohibits the board members from engaging in *ex parte* communications during permitting, enforcement, or other “quasi-adjudicatory” matters. As a permitting proceeding, Los Angeles Water Board members may not discuss the subject of this hearing with any person, except during the public hearing itself.

VI. ADDITIONAL INFORMATION

Communications and/or questions should be directed to:

Mr. Ivar Ridgeway
320 W. 4th Street, Suite 200
Los Angeles, CA 90013
(213) 620-2150
iridgeway@waterboards.ca.gov

Date: October 18, 2012

LYRIS MAILING

RB-AR18930

LIST NAME: LA County MS4
 DATE MAILED: 10-18-12

DATEJOINED_	EMAILADDR_	FULLNAME_
2/2/2011 12:04	ADRIEN236@VLPRODUCE.COM	ADRIEN F. MADDALENO
6/22/2010 11:57	AEMiller@waterboards.ca.gov	Alan E. Miller
3/27/2012 13:25	Berry.Ueoka@EverestConsultants.com	Berry Ueoka
3/22/2012 15:22	BryantA@lwa.com	Bryant Alvarado
11/15/2010 7:46	CaliforniaWaterTechnologies@gmail.com	Carlos Aguilar
7/6/2009 13:38	City_manager@ci.glendora.ca.us	Chris Jeffers
11/16/2011 7:58	DLiu@DiamondBarCA.Gov	David G. Liu
6/11/2011 22:09	Daniel.Lee@Arcadis-us.com	Daniel K. Lee
2/22/2010 18:03	Dave@Bubalo.com	Dave Sorem
5/2/2011 6:54	Debbie.Neev@gmail.com	Deborah Neev
7/6/2009 13:58	EKiepke@WILLDAN.com	E. Kiepke
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6/12/2012 11:32	Fresh@freshcreek.com	wallytrnka
10/5/2010 11:14	Gerhardt.Hubner@ventura.org	Gerhardt Hubner
3/22/2010 15:01	Hamid.Tadayon@lacity.org	Hamid Tadayon
7/6/2009 13:07	James.Destefano@ci.diamond-bar.ca.us	James DeStefano
1/19/2010 11:06	Jeremy.Bock@Kiewit.com	Jeremy Bock
3/7/2012 16:27	Jim@CuratingLA.com	Jim Gilbert
7/6/2009 13:35	John.Beshay@westcovina.org	John Beshay
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7/6/2009 13:53	Kaden.Young@culvercity.org	Kaden Young
11/16/2011 8:45	LLanger@localgovlaw.com	Lauren Langer
4/5/2011 9:34	Leroy.Richards@msh.dmh.ca.gov	LeRoy Richards
8/25/2010 13:32	Lynn@MLMENG.com	Lynn Kubasek
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6/8/2010 15:11	Nels@stemmdevelopment.com	Nels Stemm
12/29/2011 11:05	Ppeuron@forestlawn.com	Peter Peuron
11/16/2011 8:43	RYee@DiamondBarCA.Gov	Rick Yee
10/22/2010 15:23	Ramon@calfran.net	Ramon Wagner
7/6/2009 13:51	Rhughes@WILLDAN.com	Roxanne Hughes
4/25/2011 15:19	Robert.Vega@lacity.org	Robert Vega
7/6/2009 11:32	Sandra.Kelley@waterboards.ca.gov	Sandra Kelley
7/6/2009 13:23	Shannon.Yauchzee@westcovina.org	Shannon Yauchzee
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12/12/2011 10:54	adanortega@me.com	Adan Ortega
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7/6/2009 13:54 aharrington@ci.claremont.ca.us	Andrea Harrington
7/28/2009 8:26 aibanezjr@gmail.com	alfred ibanez
7/6/2009 13:46 ajensen@ci.walnut.ca.us	Alicia Jensen
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11/16/2011 8:59 alexh@ci.commerce.ca.us	Alex Hamilton
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7/9/2009 9:57 avarela@lakewoodcity.org	Alma Varela
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12/22/2011 11:16 barbara.klos@urs.com	Barbara Klos
1/18/2011 13:37 bbax@lacs.org	Beth Bax
11/9/2011 10:17 bburgess6410@yahoo.com	Brandon Burgess
10/15/2012 8:15 bdawadi@civiltec.com	Bed Dawadi
7/1/2012 18:03 bdepoto@yahoo.com	Bill DePoto
7/6/2009 13:19 bill.workman@redondo.org	Bill Workman
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7/6/2009 13:38 binman@ci.sierra-madre.ca.us	Bruce Inman
7/8/2009 10:48 binman@cityofsierramadre.com	Bruce Inman
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1/13/2011 11:49 bmorales@depintomorales.com	Bob Morales
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11/16/2011 8:03 brai@cityofinglewood.org	Bamehwar Rai
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5/3/2011 10:15	cchang@wrđ.org	Cathy Chang
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4/5/2012 14:22	cdirenzo@beverlyhills.org	Christian Di Renzo
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4/23/2012 20:12	chrism@lwa.com	chris minton
7/6/2009 13:08	citymanager@hiddenhillscity.org	Cherie L. Paglia
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10/2/2012 16:13	connie@csgcalifornia.com	Connie Gallippi
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1/21/2012 19:26 emmanuel.riclet@gmail.com	EMMANUEL RICLET
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6/11/2012 18:08 gcg-corp@peoplepc.com	Ramon Lupercio
11/21/2011 7:50 gderas@pico-rivera.org	Gladis Deras
11/16/2011 8:45 gderas@sogate.org	Gladis Deras
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7/6/2009 13:04 tcoroalles@cityofcalabasas.com	Anthony Coroalles
7/31/2009 15:57 tford@smbaykeeper.org	Tom Ford
2/23/2012 8:33 tiffanyshedrick@santafesprings.org	Tiffany Shedrick
12/13/2011 10:32 tliddell@kirklandwa.gov	Tommy Liddell
5/31/2011 16:30 tom.mitchell@pardeehomes.com	Tom Mitchell
12/15/2009 10:51 tony.barboza@latimes.com	Tony Barboza
3/23/2010 11:19 tony.pepe@csun.edu	Tony Pepe
9/16/2010 10:20 tony@csstudios.com	Tony Ignacio
2/20/2012 13:01 tracy@egoscuelaw.com	Tracy Egoscue
7/6/2009 13:10 trobinson@cityoflamirada.org	Tom E. Robinson
7/6/2009 11:29 trodgers@waterboards.ca.gov	Theresa Rodgers
11/14/2011 8:33 tsmith@bonterraconsulting.com	Thomas Smith
7/6/2009 12:59 ttait@ci.arcadia.ca.us	Tom Tait
7/6/2009 13:22 tybarra@soelmonte.org	Tony Ybarra
4/3/2011 19:01 uhdenr@metro.net	Roger Uhden
6/17/2011 20:16 uyeda@pbworld.com	Pamela Uyeda
7/6/2009 13:42 vcastro@ci.covina.ca.us	Vivian Castro
4/11/2011 13:02 vcastro@covinaca.gov	Vivian Castro
1/24/2011 11:30 vhevener@ci.arcadia.ca.us	Vanessa Hevener
11/7/2011 11:10 victor.kennedy@cshs.org	Victor Kennedy
11/16/2011 8:39 vpeterson@malibucity.org	Vic Peterson
10/28/2010 12:38 vsalazar@ldcla.com	Victor Salazar PE
7/6/2009 13:03 vsinghal@baldwinpark.com	Vijay Singhal

2/18/2011 11:31	wade@grahamstudio.net	Wade Graham
2/21/2012 4:06	wbotha@brownandwinters.com	Wentzelee Botha
6/29/2011 9:59	wcaffrey@vandermostconsulting.com	wade caffrey
12/29/2011 11:17	welchrc@pbworld.com	Robert Welch
11/14/2011 16:14	wgross@lacs.org	bill gross
8/6/2012 10:00	wjohnson@dpw.lacounty.gov	William Johnson
7/6/2009 13:52	wrlindinc@aol.com	Wes Lind
8/17/2011 11:33	wynesta@earthlink.net	Wynesta Dale
11/16/2011 8:58	ykwan@lcf.ca.gov	Ying Kwan
7/6/2009 13:35	ys@cityofrh.net	Yolanta Schwartz
12/6/2010 17:34	ysim@dpw.lacounty.gov	Youn Sim
9/17/2010 8:45	zora.baharians@lacity.org	Zora

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

LOS ANGELES REGION

320 W. 4th Street, Suite 200, Los Angeles, California 90013

Phone (213) 576 - 6600 • Fax (213) 576 - 6640

<http://www.waterboards.ca.gov/losangeles>

**ORDER NO. R4-2012-XXXX
NPDES PERMIT NO. CAS004001**

**WASTE DISCHARGE REQUIREMENTS
FOR MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) DISCHARGES WITHIN THE
COASTAL WATERSHEDS OF LOS ANGELES COUNTY, EXCEPT THOSE FLOOD CONTROL
DISTRICT, INCLUDING THE COUNTY OF LOS ANGELES, AND THE INCORPORATED CITIES
THEREIN,
~~EXCEPT DISCHARGES ORIGINATING FROM THE CITY OF LONG BEACH MS4~~**

The municipal discharges of storm water and non-storm water by the Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the Los Angeles County Flood Control District with the exception of the City of Long Beach (hereinafter referred to separately as Permittees and jointly as the Dischargers) from the discharge points identified below are subject to waste discharge requirements as set forth in this Order.

I. FACILITY INFORMATION

Table 1. Discharger Information

Dischargers	The Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the Los Angeles County Flood Control District with the exception of the City of Long Beach (See Table 4)
Name of Facility	Municipal Separate Storm Sewer Systems (MS4s) within the Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the Los Angeles County Flood Control District with the exception of the City of Long Beach
Facility Address	Various (see Table 2)
	Various (see Table 2)
The U.S. Environmental Protection Agency (USEPA) and the California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board) have classified the Greater Los Angeles County MS4 as a large municipal separate storm sewer system (MS4) pursuant to 40 CFR section 122.26(b)(4) and a major facility pursuant to 40 CFR section 122.2.	

Table 2. Facility Information

Permittee (WDID)	Contact Information	
Agoura Hills	Mailing Address	30001 Ladyface Court

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Permittee (WDID)	Contact Information	
(4B190147001)		Agoura Hills, CA 91301
	Facility Contact, Title, and E-mail	Ken Berkman, City Engineer kberkman@agoura-hills.ca.us
Alhambra (4B190148001)	Mailing Address	111 South First Street Alhambra, CA 91801-3796
	Facility contact, title, and E-mail	David Dolphin ddolphin@cityofalhambra.org
Arcadia (4B190149001)	Mailing Address	P.O. Box 60021 Arcadia, CA 91066-6021
	Facility Contact, Title, and E-mail	Susannah Turney, Environmental Services Officer vhevener@ci.arcadia.ca.us
Artesia (4B190150001)	Mailing Address	18747 Clarkdale Avenue Artesia, CA 90701-5899
	Facility Contact, Title, and E-mail	Maria Dadian, Director of Public Works mdadian@cityofartesia.ci.us
Azusa (4B190151001)	Mailing Address	213 East Foothill Boulevard Azusa, CA 91702
	Facility Contact, Title, and E-mail	Carl Hassel, City Engineer chassel@ci.azusa.ca.us
Baldwin Park (4B190152001)	Mailing Address	14403 East Pacific Avenue Baldwin Park, CA 91706-4297
	Facility Contact, Title, and E-mail	David Lopez, Associate Engineer dlopez@baldwinpark.com
Bell (4B190153001)	Mailing Address	6330 Pine Avenue Bell, CA 90201-1291
	Facility Contact, Title, and E-mail	Terri Rodrigue, City Engineer trodrigue@cityofbell.org
Bell Gardens (4B190139002)	Mailing Address	7100 South Garfield Avenue Bell Gardens, CA 90201-3293
	Facility contact, title, and Phone	John Oropeza, Director of Public Works (562) 806-7700
Bellflower (4B190154001)	Mailing Address	16600 Civic Center Drive Bellflower, CA 90706-5494
	Facility Contact, Title, and E-mail	Bernie Iniguez, Management Analyst biniguez@bellflower.org
Beverly Hills (4B190132002)	Mailing Address	455 North Rexford Drive Beverly Hills, CA 90210
	Facility Contact, Title, and E-mail	Vincent Chee, Project Civil Engineer kgettler@beverlyhills.org
Bradbury (4B190155001)	Mailing Address	600 Winston Avenue Bradbury, CA 91010-1199
	Facility contact, title, and E-mail	Elroy Kiepke, City Engineer mkeith@cityofbradbury.org
Burbank (4B190101002)	Mailing Address	P.O. Box 6459 Burbank, CA 91510
	Facility contact, title, and E-mail	Bonnie Teaford, Public Works Director bteaford@ci.burbank.ca.us
Calabasas (4B190157001)	Mailing Address	26135 Mureau Road Calabasas, CA 91302-3172
	Facility contact, title, and E-mail	Alex Farassati, ESM afarassati@cityofcalabasas.com

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Permittee (WDID)	Contact Information	
Carson (4B190158001)	Mailing Address	P.O. Box 6234 Carson, CA 90745
	Facility contact, title, and E-mail	Patricia Elkins, Building Construction Manager pelkins@carson.ca.us
Cerritos (4B190159001)	Mailing Address	P.O. Box 3130 Cerritos, CA 90703-3130
	Facility Contact, Title, and E-mail	Mike O'Grady, Environmental Services mo'grady@cerritos.us
Claremont (4B190160001)	Mailing Address	207 Harvard Avenue Claremont, CA 91711-4719
	Facility Contact, Title, and E-mail	Craig Bradshaw, City Engineer cbradshaw@ci.claremont.ca.us
Commerce (4B190161001)	Mailing Address	2535 Commerce Way Commerce, CA 90040-1487
	Facility contact, title, and E-mail	Gina Nila gnila@ci.commerce.ca.us
Compton (4B190162001)	Mailing Address	205 South Willowbrook Avenue Compton, CA 90220-3190
	Facility contact, title, and Phone	Hien Nguyen, Assistant City Engineer 310-761-1476
Covina (4B190163001)	Mailing Address	125 East College Street Covina, CA 91723-2199
	Facility Contact, Title, and E-mail	Charles Redden Vivian Castro, Environmental Services Manager vcastro@covinaca.gov
Cudahy (4B190164001)	Mailing Address	P.O. Box 1007 Cudahy, CA 90201-6097
	Facility contact, title, and E-mail	Hector Rodriguez, City Manager hrodriguez@cityofcudahy.ca.us
Culver City (4B190165001)	Mailing Address	9770 Culver Boulevard Culver City, CA 90232-0507
	Facility contact, title, and Phone	Damian Skinner, Manager 310-253-6421
Diamond Bar (4B190166001)	Mailing Address	21825 East Copley Drive Diamond Bar, CA 91765-4177
	Facility Contact, Title, and E-mail	David Liu, Director of Public Works dliu@diamondbarca.gov
Downey (4B190167001)	Mailing Address	P.O. Box 7016 Downey, CA 90241-7016
	Facility contact, title, and E-mail	Yvonne Blumberg yblumberg@downeyca.org
Duarte (4B190168001)	Mailing Address	1600 Huntington Drive Duarte, CA 91010-2592
	Facility contact, title, and Phone	Steve Esbenshades, Engineering Division Manager (626) 357-7931 ext. 233
El Monte (4B190169001)	Mailing Address	P.O. Box 6008 El Monte, CA 91731
	Facility contact, title, and Phone	James A Enriquez, Director of Public Works (626) 580-2058
El Segundo (4B190170001)	Mailing Address	350 Main Street El Segundo, CA 90245-3895
	Facility Contact, Title,	Ron Fajardo Stephanie Katsouleas, Wastewater

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Permittee (WDID)	Contact Information	
	<u>Phone, and E-mail</u>	Supervisor Public Works Director (310) 524-2356 skatsouleas@elsegundo.org
Gardena (4B190118002)	Mailing Address	P.O. Box 47003 Gardena, CA 90247-3778
	Facility Contact, Title, and E-mail	Ron Jackson, Building Maintenance Supervisor jfelix@ci.gardena.ci.us
Glendale (4B190171001)	Mailing Address	Engineering Section, 633 East Broadway, Room 209 Glendale, CA 91206-4308
	Facility contact, title, and E-mail	Maurice Oillataguerre, Senior Environmental Program Scientist moillataguerre@ci.glendale.ca.us
Glendora (4B190172001)	Mailing Address	116 East Foothill Boulevard Glendora, CA 91741
	Facility Contact, Title, and E-mail	Dave Davies, Deputy Director of Public Works ddavies@ci.glendora.ca.us
Hawaiian Gardens (4B190173001)	Mailing Address	21815 Pioneer Boulevard Hawaiian Gardens, CA 90716
	Facility Contact, Title, and E-mail	Joseph Colombo, Director of Community Development jcolombo@ghcity.org
Hawthorne (4B190174001)	Mailing Address	4455 West 126 th Street Hawthorne, CA 90250-4482
	Facility Contact, Title, and E-mail	Arnold Shadbeh, Chief General Service and Public Works Arnold Shadbeh, Chief General Service and Public Works ashadbeh@cityofhawthorne.org
Hermosa Beach (4B190175001)	Mailing Address	1315 Valley Drive Hermosa Beach, CA 90254-3884
	Facility Contact, Title, and E-mail	Homayoun Behboodi, Associate Engineer hbehboodi@hermosabch.org
Hidden Hills (4B190176001)	Mailing Address	6165 Spring Valley Road Hidden Hills, CA 91302
	Facility contact, title, and Phone	Kimberly Colberts, Environmental Coordinator (310) 257-2004
Huntington Park (4B190177001)	Mailing Address	6550 Miles Avenue Huntington Park, CA 90255
	Facility contact, title, and Phone	Craig Melich, City Engineer and City Official 323-584-6253
Industry (4B190178001)	Mailing Address	P.O. Box 3366 Industry, CA 91744-3995
	Facility Contact, Title,	Mike Nagaoka, Director of Public Safety
Inglewood (4B190179001)	Mailing Address	P.O. Box 65001 W. Manchester Blvd, 3 rd Floor Inglewood, CA 90301-1750
	Facility Contact, Title, and E-mail	Jim Davis Lauren Amimoto, Senior Administrative Analyst eparkerlamimoto@cityofinglewood.org
Irwindale (4B190180001)	Mailing Address	5050 North Irwindale Avenue Irwindale, CA 91706
	Facility Contact, Title, and E-mail	Kwok Tam, Director of Public Works ktam@ci.irwindale.ca.us
La Canada Flintridge	Mailing Address	1327 Foothill Boulevard La Canada Flintridge, CA 91011-2137

Permittee (WDID)	Contact Information	
(4B190181001)	Facility contact, title, and E-mail	Edward G. Hitti, Director of Public Works ehitti@lcf.ca.gov
La Habra Heights (4B190182001)	Mailing Address	1245 North Hacienda Boulevard La Habra Heights, CA 90631-2570
	Facility Contact, Title, and E-mail	Shauna Clark, City Manager shaunac@lhcity.org
La Mirada (4B190183001)	Mailing Address	13700 La Mirada Boulevard La Mirada, CA 90638-0828
	Facility Contact, Title, and E-mail	Steve Forster, Public Works Director sforster@cityoflamirada.org
La Puente (4B190184001)	Mailing Address	15900 East Marin Street La Puente, CA 91744-4788
	Facility Contact, Title, and E-mail	John DiMario, Director of Development Services jdimario@lapuente.org
La Verne (4B190185001)	Mailing Address	3660 "D" Street La Verne, CA 91750-3599
	Facility Contact, Title, and E-mail	Daniel Keeseey, Director of Public Works dkeeseey@ci.la-verne.ca.us
Lakewood (4B190186001)	Mailing Address	P.O. Box 158 Lakewood, CA 90714-0158
	Facility contact, title, and E-mail	Konya Vivanti kvivanti@lakewoodcity.org
Lawndale (4B190127002)	Mailing Address	14717 Burin Avenue Lawndale, CA 90260
	Facility Contact, Title,	Marlene Miyoshi, Senior Administrative Analyst
Lomita (4B190187001)	Mailing Address	P.O. Box 339 Lomita, CA 90717-0098
	Facility Contact, Title, and E-mail	Tom A. Odom, City Administrator d.tomita@lomitacity.com
Los Angeles (4B190188001)	Mailing Address	1149 S. Broadway, 10 th Floor Los Angeles, CA 90015
	Facility contact, title, and Phone	Shahram Kharaghani, Program Manager (213) 485-0587
Lynwood (4B190189001)	Mailing Address	11330 Bullis Road Lynwood, CA 90262-3693
	Facility contact, title, and Phone	Josef Kekula 310-603-0220 ext. 287
Malibu (4B190190001)	Mailing Address	23845-23825 Stuart Ranch Road Malibu, CA 90265-4861
	Facility Contact, Title, and E-mail	Jennifer VeeceolaBrown, Environmental Program Analyst jveeolaibrown@malibucity.org
Manhattan Beach (4B190191001)	Mailing Address	1400 Highland Avenue Manhattan Beach, CA 90266-4795
	Facility Contact, Title, and Email	Brian Wright, Water Supervisor bwright@citymb.info
Maywood (4B190192001)	Mailing Address	4319 East Slauson Avenue Maywood, CA 90270-2897
	Facility contact, title, and Phone	Andre Dupret, Project Manager 323-562-5721
Monrovia (4B190193001)	Mailing Address	415 South Ivy Avenue Monrovia, CA 91016-2888

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Permittee (WDID)	Contact Information	
	Facility contact, title, and E-mail	Heather Maloney hmaloney@ci.monrovia.ca.gov
Montebello (4B190194001)	Mailing Address	1600 West Beverly Boulevard Montebello, CA 90640-3970
	Facility contact, title, and Phone	Cory Roberts croberts@aaeinc.com
Monterey Park (4B190195001)	Mailing Address	320 West Newmark Avenue Monterey Park, CA 91754-2896
	Facility contact, title, and E-mail	Amy Ho, 626-307-1383 amho@montereypark.ca.gov John Hunter (Consultant) at jhunter@jhla.net
Norwalk (4B190196001)	Mailing Address	P.O. Box 1030 Norwalk, CA 90651-1030
	Facility Contact, Title,	Chino Consunji, City Engineer
Palos Verdes Estates (4B190197001)	Mailing Address	340 Palos Verdes Drive West Palos Verdes Estates, CA 90274
	Facility Contact, Title, and E-mail	Allan Rigg, Director of Public Works arigg@pvestates.org
Paramount (4B190198001)	Mailing Address	16400 Colorado Avenue Paramount, CA 90723-5091
	Facility contact, title, and E-mail	Chris Cash, Utility and Infrastructure Assistant Director ccash@paramountcity.org
Pasadena (4B190199001)	Mailing Address	P.O. Box 7115 Pasadena, CA 91109-7215
	Facility contact, title, and E-mail	Stephen Walker swalker@cityofpasadena.net
Pico Rivera (4B190200001)	Mailing Address	P.O. Box 1016 Pico Rivera, CA 90660-1016
	Facility contact, title, and E-mail	Art Cervantes, Director of Public Works acervantes@pico-rivera.org
Pomona (4B190145003)	Mailing Address	P.O. Box 660 Pomona, CA 91769-0660
	Facility Contact, Title, and E-mail	Kimberly Colbert, Julie Carver, Environmental Compliance Consultant Programs Coordinator kimberlyjulie_carvercolbert@ci.pomona.ca.us
Rancho Palos Verdes (4B190201001)	Mailing Address	30940 Hawthorne Boulevard Rancho Palos Verdes, CA 90275
	Facility Contact, Title, and E-mail	Ray Holland, Interim Public Works Director clehr@rpv.com
Redondo Beach (4B190143002)	Mailing Address	P.O. Box 270 Redondo Beach, CA 90277-0270
	Facility Contact, Title, and E-mail	Mike Shay, Principal Civil Engineer mshay@redondo.org
Rolling Hills (4B190202001)	Mailing Address	2 Portuguese Bend Road Rolling Hills, CA 90274-5199
	Facility Contact, Title, and E-mail	Greg Grammer, Assistant to the City Manager ggrammer@rollinghillsestatesca.gov
Rolling Hills Estates (4B190203001)	Mailing Address	4045 Palos Verdes Drive North Rolling Hills Estates, CA 90274
	Facility Contact, Title, and E-mail	Greg Grammer, Assistant to the City Manager ggrammer@rollinghillsestatesca.gov

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Permittee (WDID)	Contact Information	
Rosemead (4B190204001)	Mailing Address	8838 East Valley Boulevard Rosemead, CA 91770-1787
	Facility contact, title, and Phone	Chris Marcarello, Director of PW 626-569-2118
San Dimas (4B190205001)	Mailing Address	245 East Bonita Avenue San Dimas, CA 91773-3002
	Facility Contact, Title, and E-mail	Latoya Cyrus, Environmental Services Coordinator, lcyrus@ci.san-dimas.ca.us
San Fernando (4B190206001)	Mailing Address	117 Macneil Street San Fernando, CA 91340
	Facility contact, title, and E-mail	Ron Ruiz, Director of Public Works rruiz@sfcity.org
San Gabriel (4B190207001)	Mailing Address	425 South Mission Drive San Gabriel, CA 91775
	Facility contact, title, and Phone	Daren T. Grilley, City Engineer 626-308-2806 ext. 4631
San Marino (4B190208001)	Mailing Address	2200 Huntington Drive San Marino, CA 91108-2691
	Facility contact, title, and E-mail	Chuck Richie, Director of Parks and Public Works criche@cityofsanmarino.org
Santa Clarita (4B190117001)	Mailing Address	23920 West Valencia Boulevard, Suite 300 Santa Clarita, CA 91355
	Facility contact, title, and Phone	Travis Lange, Environmental Services Manager 661-255-4337
Santa Fe Springs (4B190108003)	Mailing Address	P.O. Box 2120 Santa Fe Springs, CA 90670-2120
	Facility Contact, Title, and E-mail	Sarina Morales-Choate, Civil Engineer Assistant smorales-choate@santafesprings.org
Santa Monica (4B190122002)	Mailing Address	1685 Main Street Santa Monica, CA 90401-3295
	Facility Contact, Title, and E-mail	Neal Shapiro, Urban Runoff Coordinator nshapiro@smgov.net
Sierra Madre (4B190209001)	Mailing Address	232 West Sierra Madre Boulevard Sierra Madre, CA 91024-2312
	Facility contact, title, and phone	James Carlson, Management Analyst 626-355-7135 ext. 803
Signal Hill (4B190210001)	Mailing Address	2175 Cherry Avenue Signal Hill, CA 90755
	Facility contact, title, and Phone	John Hunter 562-802-7880 jhunter@jlha.net
South El Monte (4B190211001)	Mailing Address	1415 North Santa Anita Avenue South El Monte, CA 91733-3389
	Facility contact, title, and Phone	Anthony Ybarra, City Manager 626-579-6540
South Gate (4B190212001)	Mailing Address	8650 California Avenue South Gate, CA 90280
	Facility contact, title, and E-mail	John Hunter 562-802-7880 jhunter@jlha.net

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Permittee (WDID)	Contact Information	
South Pasadena (4B190213001)	Mailing Address	1414 Mission Street South Pasadena, CA 91030-3298
	Facility contact, title, and E-mail	John Hunter 562-802-7880 jhunter@jlha.net
Temple City (4B190214001)	Mailing Address	9701 Las Tunas Drive Temple City, CA 91780-2249
	Facility contact, title, and Phone	Joe Lambert at 626-285-2171 or John Hunter 562-802-7880 jhunter@jlha.net
Torrance (4B190215001)	Mailing Address	3031 Torrance Boulevard Torrance, CA 90503-5059
	Facility Contact, Title, and Phone	Leslie Cortez, Senior Administrative Assistant
Vernon (4B190216001)	Mailing Address	4305 Santa Fe Avenue Vernon, CA 90058-1786
	Facility contact, title, and Phone	Claudia Arellano 323-583-8811
Walnut (4B190217001)	Mailing Address	P.O. Box 682 Walnut, CA 91788
	Facility Contact, Title, and Phone	Jack Yoshino, Senior Management Assistant
West Covina (4B190218001)	Mailing Address	P.O. Box 1440 West Covina, CA 91793-1440
	Facility Contact, Title, and E-mail	Samuel Gutierrez, Engineering Technician sam.gutierrez@westcovina.org
West Hollywood (4B190219001)	Mailing Address	8300 Santa Monica Boulevard West Hollywood, CA 90069-4314
	Facility Contact, Title, and E-mail	Jan Harmon Sharon Perlstein , Environmental Services Specialist City Engineer jharmonsp@weho.org
Westlake Village (4B190220001)	Mailing Address	31200 Oak Crest Drive Westlake Village, CA 91361
	Facility Contact, Title, and E-mail	Roxanne Hughes, Stormwater Program Coordinator rhughes@wlv.org
Whittier (4B190221001)	Mailing Address	13230 Penn Street Whittier, CA 90602-1772
	Facility Contact, Title, and E-mail	David Mochizuki, Director of Public Works dmoichizuki@cityofwhittier.org
County of Los Angeles (4B190107099)	Mailing Address	900 South Fremont Avenue Alhambra, CA 91803
	Facility contact, title, and Phone	Gary Hildebrand, Assistant Deputy Director Terri Grant , Division Engineer 626-458-4300 ghildeb@dpw.lacounty.gov
Los Angeles County Flood Control District (4B190107101)	Mailing Address	900 South Fremont Avenue Alhambra, CA 91803
	Facility contact, title, and Phone	Gary Hildebrand, Assistant Deputy Director Terri Grant , Division Engineer 626-458-4300 ghildeb@dpw.lacounty.gov

Table 3. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
All Municipal Separate Storm Sewer System discharge points within the Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the Los Angeles County Flood Control District with the exception of the City of Long Beach	Storm Water and Non-Storm Water	Numerous	Numerous	Surface waters identified in Tables 2-1, 2-1a, 2-3, and 2-4, and Appendix 1, Table 1 of the <i>Water Quality Control Plan - Los Angeles Region (Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties)</i> , and other unidentified tributaries to these surface waters within the following Watershed Management Areas: (1) Santa Clara River Watershed; (2) Santa Monica Bay Watershed Management Area, including Malibu Creek Watershed and Ballona Creek Watershed; (3) Los Angeles River Watershed; (4) Dominguez Channel and Greater Los Angeles/Long Beach Harbors Watershed Management Area; (5) Los Cerritos Channel and Alamitos Bay Watershed Management Area; (6) San Gabriel River Watershed; and (7) Santa Ana River Watershed. ¹

Table 4. Administrative Information

This Order was adopted by the California Regional Water Quality Control Board, Los Angeles Region on:	<Adoption Date>
This Order becomes effective on:	<Effective Date>
This Order expires on:	<Expiration Date>
In accordance with Title 23, Division 3, Chapter 9 of the California Code of Regulations and Title 40, Part 122 of the Code of Federal Regulations, each Discharger shall file a Report of Waste Discharge as application for issuance of new waste discharge requirements no later than:	180 days prior to the Order expiration date above

¹ Note that the Santa Ana River Watershed lies primarily within the boundaries of the Santa Ana Regional Water Quality Control Board. However, a portion of the Chino Basin subwatershed lies within the jurisdictions of Pomona and Claremont in Los Angeles County. The primary receiving water within the Los Angeles County portion of the Chino Basin subwatershed is San Antonio Creek.

R E V I S E D T E N T A T I V E

In accordance with section 2235.4 of Title 23 of the California Code of Regulations, the terms and conditions of an expired permit are automatically continued pending issuance of a new permit if all requirements of the federal NPDES regulations on continuation of expired permits are complied with. Accordingly, if a new order is not adopted by the expiration date above, then the Permittees shall continue to implement the requirements of this Order until a new one is adopted.

I, Samuel Unger, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on <Adoption Date>.

Samuel Unger, Executive Officer

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II. FINDINGS

The California Regional Water Quality Control Board, Los Angeles Region (hereinafter Regional Water Board) finds:

A. Nature of Discharges and Sources of Pollutants

Storm water and non-storm water discharges consist of surface runoff generated from various land uses, which are conveyed via the municipal separate storm sewer system and ultimately discharged into surface waters throughout the region. Discharges of storm water and non-storm water from the Los Angeles County Municipal Separate Storm Sewer Systems (MS4s) within the Coastal Watersheds of Los Angeles County convey pollutants to surface waters throughout the Los Angeles Region. The primary pollutants of concern in these discharges, as identified by the Los Angeles County Flood Control District Integrated Receiving Water Impacts Report (1994-~~2000~~2005), are indicator bacteria, total aluminum, copper, lead, zinc, diazinon, and cyanide~~indicator bacteria, nutrients, total dissolved solids, turbidity, total suspended solids, total aluminum, dissolved cadmium, copper, lead, total mercury, nickel, zinc, cyanide, bis(2-ethylhexyl)phthalate, polycyclic aromatic hydrocarbons (PAHs), diazinon, and chlorpyrifos~~. Aquatic toxicity, particularly during wet weather, is also a concern based on a review of Annual Monitoring Reports from 2005-10. Storm water and non-storm water discharges of debris and trash are also a pervasive water quality problem in the Los Angeles Region though significant strides have been made by a number of Permittees in addressing this problem through the implementation of control measures to achieve wasteload allocations established in trash TMDLs.

Pollutants in storm water and non-storm water have damaging effects on both human health and aquatic ecosystems. Water quality assessments conducted by the Regional Water Board have identified impairment of beneficial uses of water bodies in the Los Angeles Region caused or contributed to by pollutant loading from municipal storm water and non-storm water discharges. As a result of these impairments, there are beach postings and closures, fish consumption advisories, local and global ecosystem and aesthetic impacts from trash and debris, reduced habitat for threatened and endangered species, among others. The Regional Water Board and USEPA have established 33 total maximum daily loads (TMDLs) that identify Los Angeles County MS4 discharges as one of the pollutant sources causing or contributing to these water quality impairments.

B. Permit History

Prior to the issuance of this Order, Regional Water Board Order No. 01-182 served as the NPDES Permit for MS4 storm water and non-storm water discharges within the Coastal Watersheds of the County of Los Angeles. The requirements of Order No. 01-182 applied to the Los Angeles County Flood Control District, the unincorporated areas of Los Angeles County under County jurisdiction, and 84 Cities within the Los Angeles County Flood Control District with the exception of the City of Long Beach. The first

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county-wide MS4 permit for the County of Los Angeles and the incorporated areas therein was Order No. 90-079, adopted by the Regional Water Board on June 18, 1990.

Under Order No. 01-182, the Los Angeles County Flood Control District was designated the Principal Permittee, and the County of Los Angeles and 84 incorporated Cities were each designated Permittees. The Principal Permittee coordinated and facilitated activities necessary to comply with the requirements of Order No. 01-182, but was not responsible for ensuring compliance of any of the other Permittees. The designation of a Principal Permittee has not been carried over from Order No. 01-182.

Order No. 01-182 was subsequently amended by the Regional Water Board on September 14, 2006 by Order No. R4-2006-0074 to incorporate provisions consistent with the assumptions and requirements of the Santa Monica Bay Beaches Dry Weather Bacteria TMDL (SMB Dry Weather Bacteria TMDL) waste load allocations (WLAs). As a result of a legal challenge to Order No. R4-2006-0074, the Los Angeles County Superior Court issued a peremptory writ of mandate on July 23, 2010 requiring the Regional Water Board to void and set aside the amendments adopted through Order No. R4-2006-0074 in Order No. 01-182. The Court concluded that the permit proceeding at which Order No. R4-2006-0074 was adopted was procedurally deficient. The Court did not address the substantive merits of the amendments themselves, and thus made no determination about the substantive validity of Order No. R4-2006-0074. In compliance with the writ of mandate, the Regional Water Board voided and set aside the amendments adopted through Order No. R4-2006-0074 on April 14, 2011. This Order reincorporates requirements equivalent to the 2006 provisions to implement the SMB Dry Weather Bacteria TMDL.

In addition, Order No. 01-182 was amended on August 9, 2007 by Order No. R4-2007-0042 to incorporate provisions consistent with the assumptions and requirements of the Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL, and was again amended on December 10, 2009 by Order No. R4-2009-0130 to incorporate provisions consistent with the assumptions and requirements of the Los Angeles River Watershed Trash TMDL.

C. Permit Application

On June 12, 2006, prior to the expiration date of Order No. 01-182, all of the Permittees filed Reports of Waste Discharge (ROWD) applying for renewal of their waste discharge requirements that serve as an NPDES permit to discharge storm water and authorized and conditionally exempt non-storm water through their MS4 to surface waters. Specifically, the Los Angeles County Flood Control District (LACFCD) submitted an ROWD application on behalf of itself, the County of Los Angeles, and 78 other Permittees. Several Permittees under Order No. 01-182 elected to not be included as part of the Los Angeles County Flood Control District's ROWD. On June 12, 2006, the Cities of Downey and Signal Hill each submitted an individual ROWD application requesting a separate MS4 Permit; and the Upper San Gabriel River Watershed Coalition, comprised of the cities of Azusa, Claremont, Glendora, Irwindale, and Whittier

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also submitted an individual ROWD application requesting a separate MS4 Permit for these cities. In 2010, the LACFCD withdrew from its participation in the 2006 ROWD submitted in conjunction with the County and 78 other co-permittees, and submitted a new ROWD also requesting an individual MS4 permit. The LACFCD also requested that, if an individual MS4 permit was not issued to it, it no longer be designated as the Principal Permittee and it be relieved of Principal Permittee responsibilities. The Regional Water Board evaluated each of the 2006 ROWDs and notified all of the Permittees that their ROWDs did not satisfy federal storm water regulations contained in the USEPA Interpretive Policy Memorandum on Reapplication Requirements for Municipal Separate Storm Sewer Systems; Final Rule, August 9, 1996 (61 *Fed Reg.* 41697). Because each ROWD did not satisfy federal requirements, the Regional Water Board deemed all four 2006 ROWDs incomplete. The Regional Water Board also evaluated the LACFCD's 2010 ROWD and found that it too did not satisfy federal requirements for MS4s.

Though five separate ROWDs were submitted, the Regional Water Board retains discretion as the permitting authority to determine whether to issue permits for discharges from MS4s on a system-wide or jurisdiction-wide basis (Clean Water Act (CWA) § 402(p)(3)(B)(i); 40 CFR section 122.26, subdivisions (a)(1)(v) and (a)(3)(ii)). Because of the complexity and networking of the MS4 within Los Angeles County, which often results in commingled discharges, the Regional Water Board has previously adopted a system-wide approach to permitting MS4 discharges within Los Angeles County.

In evaluating the five separate ROWDs, the Regional Water Board considered the appropriateness of permitting discharges from MS4s within Los Angeles County on a system-wide or jurisdiction-wide basis or a combination of both. Based on that evaluation, the Regional Water Board again determined that, because of the complexity and networking of the MS4 within Los Angeles County, that one system-wide permit is appropriate. In order to provide individual Permittees with more specific requirements, certain provisions of this Order are organized by watershed management area, which is appropriate given the requirements to implement 33 watershed-based TMDLs. The Regional Water Board also determined that because the LACFCD owns and operates large portions of the MS4 infrastructure, including but not limited to catch basins, storm drains, outfalls and open channels, in each coastal watershed management area within Los Angeles County as the primary owner and operator of the Los Angeles County MS4, the LACFCD should remain a Permittee in the single system-wide permit; however, this Order relieves the LACFCD of its role as "Principal Permittee."

D. Permit Coverage and Facility Description

The Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the Los Angeles County Flood Control District with the exception of the City of Long Beach (see Table 5, List of Permittees), hereinafter referred to separately as Permittees and jointly as the Dischargers, discharge storm water and non-storm water from municipal separate storm sewer systems (MS4s), also called storm drain systems. For the purposes of this Order, references to the

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“Discharger” or “Permittee” in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger, or Permittees herein.

The area covered under this Order encompasses more than 3,000 square miles. This area contains a vast drainage network that serves incorporated and unincorporated areas in every Watershed Management Area within the Los Angeles Region. Maps depicting the major drainage infrastructure within the area covered under this Order are included in Attachment C of this Order.

Table 5. List of Permittees

Agoura Hills	Hawaiian Gardens	Pomona
Alhambra	Hawthorne	Rancho Palos Verdes
Arcadia	Hermosa Beach	Redondo Beach
Artesia	Hidden Hills	Rolling Hills
Azusa	Huntington Park	Rolling Hills Estates
Baldwin Park	Industry	Rosemead
Bell	Inglewood	San Dimas
Bell Gardens	Irwindale	San Fernando
Bellflower	La Canada Flintridge	San Gabriel
Beverly Hills	La Habra Heights	San Marino
Bradbury	La Mirada	Santa Clarita
Burbank	La Puente	Santa Fe Springs
Calabasas	La Verne	Santa Monica
Carson	Lakewood	Sierra Madre
Cerritos	Lawndale	Signal Hill
Claremont	Lomita	South El Monte
Commerce	Los Angeles	South Gate
Compton	Lynwood	South Pasadena
Covina	Malibu	Temple City
Cudahy	Manhattan Beach	Torrance
Culver City	Maywood	Vernon
Diamond Bar	Monrovia	Walnut
Downey	Montebello	West Covina
Duarte	Monterey Park	West Hollywood
El Monte	Norwalk	Westlake Village
El Segundo	Palos Verdes Estates	Whittier
Gardena	Paramount	County of Los Angeles
Glendale	Pasadena	Los Angeles County Flood
Glendora	Pico Rivera	Control District

~~The Los Angeles County Flood Control District encompasses more than 3,000 square miles. The LACFCD contains a vast drainage network that serves incorporated and unincorporated areas in every Watershed Management Area within the Los Angeles Region. The drainage infrastructure includes approximately 500 miles of open channels, 2,900 miles of underground storm drains, and over 80,000 catch basins. Maps depicting~~

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~~the major drainage infrastructure of the Los Angeles County MS4 are included in Attachment C of this Order.~~

E. Los Angeles County Flood Control District

In 1915, the California Legislature enacted the Los Angeles County Flood Control Act, establishing the Los Angeles County Flood Control District (LACFCD). The objects and purposes of the Act are to provide for the control and conservation of the flood, storm and other waste waters within the flood control district. Among its other powers, the LACFCD also has the power to preserve, enhance, and add recreational features to lands or interests in lands contiguous to its properties for the protection, preservation, and use of the scenic beauty and natural environment for the properties or the lands. The LACFCD is governed, as a separate entity, by the County of Los Angeles Board of Supervisors.

The LACFCD's system includes the majority of drainage infrastructure within incorporated and unincorporated areas in every watershed, including approximately 500 miles of open channel, 3,500 miles of underground drains, and an estimated 88,800 catch basins, and several dams. Portions of the LACFCD's current system were originally unmodified natural rivers and water courses.

The LACFCD's system conveys both storm and non-storm water throughout the Los Angeles basin. Other Permittees' MS4s connect and discharge to the LACFCD's system.

The waters and pollutants discharged from the LACFCD's system come from various sources. These sources can include storm water and non-storm water from the Permittees under this permit and other NPDES and non-NPDES Permittees discharging into the LACFCD's system, including industrial waste water dischargers, waste water treatment facilities, industrial and construction stormwater Permittees, water suppliers, government entities, CERCLA potentially responsible parties, and Caltrans. Sources can also include discharges from school districts that do not operate large or medium-sized municipal storm sewers and discharges from entities that have waste discharge requirements or waivers of waste discharge requirements.

Unlike other Permittees, the LACFCD does not own or operate any municipal sanitary sewer systems, public streets, roads, or highways.

The LACFCD has no planning, zoning, development permitting or other land use authority over industrial or commercial facilities, new developments or re-development projects, or development construction sites located in any incorporated or unincorporated areas within its service area. The Permittees that have such land use authority are responsible for implementing a storm water management program to inspect and control pollutants from industrial and commercial facilities, new development and re-development projects, and development construction sites within their jurisdictional boundaries.

E.F. Permit Scope

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This Order regulates municipal discharges of storm water and non-storm water from the Permittees' MS4s. Section 122.26(b)(8) of title 40 of the Code of Federal Regulations (CFR) defines an MS4 as “a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) [o]wned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States; (ii) [d]esigned or used for collecting or conveying storm water; (iii) [w]hich is not a combined sewer; and (iv) [w]hich is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.”

Storm water discharges consist of those discharges that originate from precipitation events. Federal regulations define “storm water” as “storm water runoff, snow melt runoff, and surface runoff and drainage.” (40 CFR § 122.26(b)(13).) While “surface runoff and drainage” is not defined in federal law, USEPA’s preamble to its final storm water regulations demonstrates that the term is related to precipitation events such as rain and/or snowmelt. (55 Fed. Reg. 47990, 47995-96 (Nov. 16, 1990)).

Non-storm water discharges consist of all discharges through an MS4 that do not originate from precipitation events. Non-storm water discharges through an MS4 are prohibited unless authorized under a separate NPDES permit; authorized by USEPA pursuant to Sections 104(a) or 104(b) of the federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); composed of natural flows; the result of emergency fire fighting activities; or conditionally exempted in this Order.

A permit issued to more than one Permittee for MS4 discharges may contain separate storm water management programs for particular Permittees or groups of Permittees. 40 CFR § 122.26(d)(2)(iv). Given the LACFCD’s limited land use authority, it is appropriate for the LACFCD to have a separate and uniquely-tailored storm water management program. Accordingly, the storm water management program minimum control measures imposed on the LACFCD in Part VI.D of this Order differ in some ways from the minimum control measures imposed on other Permittees. Namely, aside from its own properties and facilities, the LACFCD is not subject to the Industrial/Commercial Facilities Program, the Planning and Land Development Program, and the Development Construction Program. However, as a discharger of storm and non-storm water, the LACFCD remains subject to the Public Information and Participation Program and the Illicit Connections and Illicit Discharges Elimination Program. Further, as the owner and operator of certain properties, facilities and infrastructure, the LACFCD remains subject to requirements of a Public Agency Activities Program.

F.G. Geographic Coverage and Watershed Management Areas

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The municipal storm water and non-storm water discharges flow into receiving waters in the Watershed Management Areas of the Santa Clara River Watershed; Santa Monica Bay Watershed Management Area, including Malibu Creek Watershed and Ballona Creek Watershed; Los Angeles River Watershed; Dominguez Channel and Greater Los Angeles/Long Beach Harbors Watershed Management Area; Los Cerritos Channel and Alamitos Bay Watershed Management Area; San Gabriel River Watershed; and Santa Ana River Watershed.

This Order redefines Watershed Management Areas (WMAs) consistent with the delineations used in the Regional Water Board's Watershed Management Initiative. Permittees included in each of the WMAs are listed in Attachment K.

Maps depicting each WMA, its subwatersheds, and the major receiving waters therein are included in Attachment B.

Federal, state, regional or local entities in jurisdictions outside the Los Angeles County Flood Control District, and not currently named as Permittee to this Order, may operate MS4 facilities and/or discharge to the MS4 and water bodies covered by this Order. Pursuant to 40 CFR sections 122.26(d)(1)(ii) and 122.26(d)(2)(iv), each Permittee shall maintain the necessary legal authority to control the contribution of pollutants to its MS4 and shall include in its storm water management program a comprehensive planning process that includes intergovernmental coordination, where necessary.

Sources of MS4 discharges into receiving waters in the County of Los Angeles but not covered by this Order include the following:

- About 34 square miles of unincorporated area in Ventura County, which drain into Malibu Creek and then to Santa Monica Bay,
- About 9 square miles of the City of Thousand Oaks, which also drain into Malibu Creek and then to Santa Monica Bay, and
- About 86 square miles of area in Orange County, which drain into Coyote Creek and then into the San Gabriel River.

Specifically, the Orange County Flood Control District (OCFCD) owns and operates the Los Alamitos Retarding Basin and Pumping Station (Los Alamitos Retarding Basin). The Los Alamitos Retarding Basin is within the San Gabriel River Watershed, and is located adjacent to the Los Angeles and Orange County boundary. The majority of the 30-acre Los Alamitos Retarding Basin is in Orange County; however, the northwest corner of the facility is located in the County of Los Angeles. Storm water and non-storm water discharges, which drain to the Los Alamitos Retarding Basin, are pumped to the San Gabriel River Estuary (SGR Estuary) through pumps and subterranean piping. The pumps and discharge point are located in the County of Los Angeles.

The OCFCD pumps the water within the Los Alamitos Retarding Basin to the San Gabriel River Estuary through four discharge pipes, which are covered by tide gates. The discharge point is located approximately 700 feet downstream from the 2nd Street Bridge in Long Beach. The total pumping capacity of the four pumps is 800 cubic feet

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per second (cfs). There is also a 5 cfs sump pump that discharges nuisance flow continuously to the Estuary through a smaller diameter uncovered pipe.

The discharge from the Los Alamitos Retarding Basin is covered under the Orange County Municipal NPDES Storm Water Permit (NPDES Permit No. CAS618030, Santa Ana Regional Water Quality Control Board Order No. R8-2010-0062), which was issued to the County of Orange, Orange County Flood Control District and Incorporated Cities on May 22, 2009. The Orange County MS4 Permit references the San Gabriel River Metals and Selenium TMDL (Metals TMDL). The waste load allocations listed in the Metals TMDL for Coyote Creek are included in the Orange County MS4 Permit. However, the Orange County MS4 Permit does not contain the dry weather copper waste load allocations assigned to the Estuary.

G. Legal Authorities

This Order is issued pursuant to CWA section 402 and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). This Order serves as an NPDES permit for point source discharges from the ~~Los Angeles County Permittees'~~ MS4s to surface waters. This Order also serves as waste discharge requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with Section 13260).

H. Municipal Separate Storm Sewer System Requirements. The 1972 Clean Water Act² established the NPDES Program to regulate the discharge of pollutants from point sources to waters of the United States. However, pollution from storm water and dry-weather urban runoff was largely unabated for over a decade. In response to the 1987 Amendments to the Clean Water Act, USEPA developed Phase I of the NPDES Storm Water Permitting Program in 1990, which established a framework for regulating municipal and industrial discharges of storm water and non-storm water. The Phase I program addressed sources of storm water and dry-weather urban runoff that had the greatest potential to negatively impact water quality. In particular, under Phase I, USEPA required NPDES Permit coverage for discharges from medium and large MS4 with populations of 100,000 or more. Operators of MS4s regulated under the Phase I NPDES Storm Water Program were required to obtain permit coverage for municipal discharges of storm water and non-storm water to waters of the United States

Early in the history of ~~the this LA County~~ MS4 Permit, the Regional Water Board designated the MS4s owned and/or operated by the incorporated cities and Los Angeles County unincorporated areas within the ~~LACFGD Coastal Watersheds of Los Angeles County~~ as a large MS4 due to the total population of Los Angeles County, including that of unincorporated and incorporated areas, and the interrelationship between the ~~Permittees'~~ MS4s throughout the ~~LACFGD~~, pursuant to 40 CFR section 122.26(b)(4). The total population of the cities and County unincorporated areas covered by this Order was 9,519,338 in 2000 and has increased by approximately 300,000 to 9,818,605 in 2010, according to the United States Census.

² Federal Water Pollution Control Act; 33 U.S.C. § 1251 et seq., which, as amended in 1977, is commonly known as the Clean Water Act.

This Order implements the federal Phase I NPDES Storm Water Program requirements. These requirements include three fundamental elements: (i) a requirement to effectively prohibit non-storm water discharges through the MS4, (ii) requirements to implement controls to reduce the discharge of pollutants to the maximum extent practicable, and (iii) other provisions ~~that the Regional Water Board has determined~~ necessary appropriate for the control of such pollutants in MS4 discharges in order to achieve water quality standards.

- I. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the Permittees' applications, through monitoring and reporting programs, and other available information. In accordance with federal regulations at 40 CFR section 124.8, a Fact Sheet (Attachment F) has been prepared to explain the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing this Order. The Fact Sheet is hereby incorporated into this Order and also constitutes part of the Findings of the Regional Water Board for this Order. Attachments A through E and G through R are also incorporated into this Order.
- J. Water Quality Control Plans.** The Clean Water Act requires the Regional Water Board to establish water quality standards for each water body in its region. Water quality standards include beneficial uses, water quality objectives and criteria that are established at levels sufficient to protect those beneficial uses, and an antidegradation policy to prevent degrading waters. The Regional Water Board adopted a *Water Quality Control Plan - Los Angeles Region* (hereinafter Basin Plan) on June 13, 1994 and has amended it on multiple occasions since 1994. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters in the Los Angeles Region. Pursuant to California Water Code section 13263(a), the requirements of this Order implement the Basin Plan. Beneficial uses applicable to the surface water bodies that receive discharges from the Los Angeles County MS4 generally include those listed below.

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Table 6. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Uses
All Municipal Separate Storm Sewer Systems (MS4s) discharge points within the Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the Los Angeles County Flood Control District with the exception of the City of Long Beach	Multiple surface water bodies of the Los Angeles Region	Municipal and Domestic Supply (MUN); Agricultural Supply (AGR); Industrial Service Supply (IND); Industrial Process Supply (PROC); Ground Water Recharge (GWR); Freshwater Replenishment (FRSH); Navigation (NAV); Hydropower Generation (POW); Water Contact Recreation (REC-1); Limited Contact Recreation (LREC-1); Non-Contact Water Recreation (REC-2); Commercial and Sport Fishing (COMM); Warm Freshwater Habitat (WARM); Cold Freshwater Habitat (COLD); Preservation of Areas of Special Biological Significance (BIOL); Wildlife Habitat (WILD); Preservation of Rare and Endangered Species (RARE); Marine Habitat (MAR); Wetland Habitat (WET); Migration of Aquatic Organisms (MIGR); Spawning, Reproduction, and/or Early Development (SPWN); Shellfish Harvesting (SHELL)

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1. Total Maximum Daily Loads (TMDLs)

Clean Water Act section 303(d)(1) requires each state to identify the waters within its boundaries that do not meet water quality standards. Water bodies that do not meet water quality standards are considered impaired and are placed on the state’s “CWA Section 303(d) List”. For each listed water body, the state is required to establish a TMDL of each pollutant impairing the water quality standards in that water body. A TMDL is a tool for implementing water quality standards and is based on the relationship between pollution sources and in-stream water quality conditions. The TMDL establishes the allowable pollutant loadings for a water body and thereby provides the basis to establish water quality-based controls. These controls should provide the pollution reduction necessary for a water body to meet water quality standards. A TMDL is the sum of the allowable pollutant loads of a single pollutant from all contributing point sources (the waste load allocations or WLAs) and non-point sources (load allocations or LAs), plus the contribution from background sources and a margin of safety. (40 CFR section 130.2(i).) MS4 discharges are considered point source discharges.

Numerous receiving waters within Los Angeles County do not meet water quality standards or fully support beneficial uses and therefore have been classified as impaired on the State’s 303(d) List. The Regional Water Board and USEPA have each established TMDLs to address many of these water quality impairments. Pursuant to CWA section 402(p)(B)(3)(iii) and 40 CFR section 122.44(d)(1)(vii)(B), this Order includes requirements that are consistent with and implement WLAs that are assigned to discharges from the Los Angeles County MS4 from 33 State-adopted and USEPA established TMDLs. This Order requires Permittees to comply with the TMDL Provisions in Part VI.E and Attachments L through R, which are

consistent with the assumptions and requirements of the TMDL WLAs assigned to discharges from the Los Angeles County MS4. A comprehensive list of TMDLs by watershed management area and the Permittees subject to each TMDL is included in Attachment K.

Waste load allocations in these TMDLs are expressed in several ways depending on the nature of the pollutant and its impacts on receiving waters and beneficial uses. Bacteria WLAs assigned to MS4 discharges are expressed as the number of allowable exceedance days that a water body may exceed the Basin Plan water quality objectives for protection of the REC-1 beneficial use. Since the TMDLs and the WLAs contained therein are expressed as receiving water conditions, receiving water limitations have been included in this Order that are consistent with and implement the allowable exceedance day WLAs. Water quality-based effluent limitations are also included equivalent to the Basin Plan water quality objectives to allow the opportunity for Permittees to individually demonstrate compliance at an outfall or jurisdictional boundary, thus isolating the Permittee's pollutant contributions from those of other Permittees and from other pollutant sources to the receiving water.

WLAs for trash are expressed as progressively decreasing allowable amounts of trash discharges from a Permittee's jurisdictional area within the drainage area to the impaired water body. The Trash TMDLs require each Permittee to make annual reductions of its discharges of trash over a set period, until the numeric target of zero trash discharged from the MS4 is achieved. The Trash TMDLs specify a specific formula for calculating and allocating annual reductions in trash discharges from each jurisdictional area within a watershed. The formula results in specified annual amounts of trash that may be discharged from each jurisdiction into the receiving waters. Translation of the WLAs or compliance points described in the TMDLs into jurisdiction-specific load reductions from the baseline levels, as specified in the TMDL, logically results in the articulation of an annual limitation on the amount of a pollutant that may be discharged. The specification of allowable annual trash discharge amounts meets the definition of an "effluent limitation", as that term is defined in subdivision (c) of section 13385.1 of the California Water Code. Specifically, the trash discharge limitations constitute a "numeric restriction ... on the quantity [or] discharge rate ... of a pollutant or pollutants that may be discharged from an authorized location."

TMDL WLAs for other pollutants (e.g., metals and toxics) are expressed as concentration and/or mass and water quality-based effluent limitations have been specified consistent with the expression of the WLA, including any applicable averaging periods. Some TMDLs specify that, if certain receiving water conditions are achieved, such achievement constitutes attainment of the WLA. In these cases, receiving water limitations and/or provisions outlining these alternate means of demonstrating compliance are included in the TMDL provisions in Part VI.E of this Order.

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The inclusion of water quality-based effluent limitations and receiving water limitations to implement applicable WLAs provides a clear means of identifying required water quality outcomes within the permit and ensures accountability by Permittees to implement actions necessary to achieve the limitations.

A number of the TMDLs for bacteria, metals, and toxics establish WLAs that are assigned jointly to a group of Permittees whose storm water and/or non-storm water discharges are or may be commingled in the MS4 prior to discharge to the receiving water subject to the TMDL. TMDLs address commingled MS4 discharges by assigning a WLA to a group of MS4 Permittees based on co-location within the same subwatershed. Permittees with co-mingled MS4 discharges are jointly responsible for meeting the water quality-based effluent limitations and receiving water limitations assigned to MS4 discharges in this Order. "Joint responsibility" means that the Permittees that have commingled MS4 discharges are responsible for implementing programs in their respective jurisdictions, or within the MS4 for which they are an owner and/or operator, to meet the water quality-based effluent limitations and/or receiving water limitations assigned to such commingled MS4 discharges.

In these cases, federal regulations state that co-permittees need only comply with permit conditions relating to discharges from the MS4 for which they are owners or operators (40 CFR § 122.26(a)(3)(vi)). Individual co-permittees are only responsible for their contributions to the commingled MS4 discharge. This Order does not require a Permittee to individually ensure that a commingled MS4 discharge meets the applicable water quality-based effluent limitations included in this Order, unless such Permittee is shown to be solely responsible for an exceedance.

Additionally, this Order allows a Permittee to clarify and distinguish their individual contributions and demonstrate that its MS4 discharge did not cause or contribute to exceedances of applicable water quality-based effluent limitations and/or receiving water limitations. If such a demonstration is made, though the Permittee's discharge may commingle with that of other Permittees, the Permittee would not be held jointly responsible for the exceedance of the water quality-based effluent limitation or receiving water limitation. Individual co-permittees who demonstrate compliance with the water quality-based effluent limitations will not be held responsible for violations by non-compliant co-permittees.

Given the interconnected nature of the ~~Los Angeles County~~ Permittees' MS4s, however, the Regional Water Board expects Permittees to work cooperatively to control the contribution of pollutants from one portion of the MS4 to another portion of the system through inter-agency agreements or other formal arrangements.

- K. Ocean Plan.** In 1972, the State Water Resources Control Board (State Water Board) adopted the Water Quality Control Plan for Ocean Waters of California, California Ocean Plan (hereinafter Ocean Plan). The State Water Board adopted the most recent amended Ocean Plan on September 15, 2009. The Office of Administration Law

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approved it on March 10, 2010. On October 8, 2010, USEPA approved the 2009 Ocean Plan. The Ocean Plan is applicable, in its entirety, to the ocean waters of the State. In order to protect beneficial uses, the Ocean Plan establishes water quality objectives and a program of implementation. Pursuant to California Water Code section 13263(a), the requirements of this Order implement the Ocean Plan. The Ocean Plan identifies beneficial uses of ocean waters of the State to be protected as summarized in the table below.

Table 7. Ocean Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Uses
All Municipal Separate Storm Sewer Systems (MS4s) discharge points within the Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the Los Angeles County Flood Control District with the exception of the City of Long Beach	Pacific Ocean	Industrial Water Supply (IND); Water Contact (REC-1) and Non-Contact Recreation (REC-2), including aesthetic enjoyment; Navigation (NAV); Commercial and Sport Fishing (COMM); Mariculture; Preservation and Enhancement of Designated Areas of Special Biological Significance (ASBS); Rare and Endangered Species (RARE); Marine Habitat (MAR); Fish Migration (MIGR); Fish Spawning (SPWN) and Shellfish Harvesting (SHELL)

L. Antidegradation Policy

40 CFR section 131.12 requires that state water quality standards include an antidegradation policy consistent with the federal antidegradation policy. The State Water Board established California’s antidegradation policy in State Water Board Resolution No. 68-16 (“Statement of Policy with Respect to Maintaining the Quality of the Waters of the State”). Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board’s Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. The permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.

M. Anti-Backsliding Requirements. Section 402(o)(2) of the CWA and federal regulations at 40 CFR section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations or other conditions in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations or conditions may be relaxed. All effluent limitations and conditions in this

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Order are at least as stringent as the effluent limitations and conditions in the previous permit.

N. Endangered Species Act. This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code, §§ 2050 to 2115.5) or the Federal Endangered Species Act (16 U.S.C.A., §§ 1531 to 1544). This Order requires compliance with requirements to protect the beneficial uses of waters of the United States. Permittees are responsible for meeting all requirements of the applicable Endangered Species Act.

O. Monitoring and Reporting. Section 308(a) of the federal Clean Water Act, and 40 CFR sections 122.41(h), (j)-(l), 122.41(i), and 122.48, requires that all NPDES permits specify monitoring and reporting requirements for recording and reporting monitoring results. Federal regulations applicable to large and medium MS4s also specify additional monitoring and reporting requirements. (40 C.F.R. §§ 122.26(d)(2)(i)(F) & (d)(2)(iii)(D), 122.42(c).) California Water Code sections 13267 and 13383 authorizes the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring, and reporting, and recordkeeping requirements to that implement the federal and State laws and/or requirements regulations. This Monitoring and Reporting Program is provided in Attachment E.

P. Standard and Special Provisions. Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR section 122.42, are provided in Attachment D. Dischargers must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR section 122.42 provided in Attachment D. The Regional Water Board has also included in Part VI of this Order various special provisions applicable to the Dischargers. A rationale for the various special provisions contained in this Order is provided in the attached Fact Sheet (Attachment F).

Q. Unfunded Mandates

Article XIII B, Section 6(a) of the California Constitution provides that whenever “any state agency mandates a new program or higher level of service on any local government, the state shall provide a subvention of funds to reimburse that local government for the costs of the program or increased level of service.” The requirements of this Order do not constitute state mandates that are subject to a subvention of funds for several reasons as described in detail in the attached Fact Sheet (Attachment F).

Q.R. Economic Considerations. The California Supreme Court has ruled that although California Water Code section 13263 requires the State and Regional Water Boards (collectively, Water Boards) to consider the factors set forth in California Water Code section 13241 when issuing an NPDES permit, the Water Boards may not consider the

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factors to justify imposing pollutant restriction that are less stringent than the applicable federal regulations require. (*City of Burbank v. State Water Resources Control Bd.* (2005) 35 Cal.4th 613, 618, 626-627). However, when the pollutant restrictions in an NPDES permit are more stringent than federal law requires, California Water Code section 13263 requires that the Water Boards consider the factors described in section 13241 as they apply to those specific restrictions. As noted in the preceding finding, the Regional Water Board finds that the requirements in this permit are not more stringent than the minimum federal requirements. Therefore, a 13241 analysis is not required for permit requirements that implement the effective prohibition on the discharge of non-storm water discharges into the MS4, or for controls to reduce the discharge of pollutants in storm water to the maximum extent practicable, or other provisions that the Regional Water Board has determined appropriate to control such pollutants, as those requirements are mandated by federal law. Notwithstanding the above, the Regional Water Board has developed an economic analysis of the permit's requirements, consistent with California Water Code section 13241. That analysis is provided in the Fact Sheet (Attachment F of this Order).

S.T. California Environmental Quality Act (CEQA). This action to adopt an NPDES Permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA) (Public Resources Code, § 21100, et seq.) pursuant to California Water Code section 13389. (*County of Los Angeles v. Cal. Water Boards* (2006) 143 Cal.App.4th 985.)

T.U. Notification of Interested Parties. In accordance with State and federal laws and regulations, the Regional Water Board has notified the Permittees and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharges authorized by this Order and has provided them with an opportunity to provide written and oral comments. Details of notification, as well as the meetings and workshops held on drafts of the permit, are provided in the Fact Sheet of this Order.

U.V. Consideration of Public Comment. The Regional Water Board, in a public meeting, heard and considered all oral and written comments pertaining to the discharges authorized by this Order and the requirements contained herein. The Regional Water Board has prepared written responses to all timely comments, which are incorporated by reference as part of this Order.

W. This Order serves as an NPDES permit pursuant to CWA section 402 or amendments thereto, and becomes effective fifty (50) days after the date of its adoption, provided that the Regional Administrator, USEPA, Region IX, expresses no objections.

X. This Order supersedes Order No. 01-182 as amended, except for enforcement purposes.

Y. Review by the State Water Board. Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must *receive* the petition by 5:00 p.m., 30 days after the Regional Water Board action, except that if the thirtieth day following the action falls on a Saturday, Sunday, or state holiday, the

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petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

THEREFORE, IT IS HEREBY ORDERED, that the Dischargers, in order to meet the provisions contained in Division 7 of the California Water Code (commencing with section 13000), and regulations, plans, and policies adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following requirements:

III. DISCHARGE PROHIBITIONS

A. Prohibitions – Non-Storm Water Discharges

1. **Prohibition of Non-Storm Water Discharges.** Each Permittee shall, for the portion of the MS4 for which it is an owner or operator, prohibit non-storm water discharges through the MS4 to receiving waters except where such discharges are either:
 - a. Authorized non-storm water discharges separately regulated by an individual or general NPDES permit;
 - b. Temporary non-storm water discharges authorized by USEPA³ pursuant to sections 104(a) or 104(b) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) that either: (i) will comply with water quality standards as applicable or relevant and appropriate requirements (“ARARs”) under section 121(d)(2) of CERCLA; or (ii) are subject to either (a) a written waiver of ARARs by USEPA pursuant to section 121(d)(4) of CERCLA or (b) a written determination by USEPA that compliance with ARARs is not practicable considering the exigencies of the situation pursuant to 40 CFR. section 300.415(j);
 - c. Authorized non-storm water discharges from emergency fire fighting activities (i.e., flows necessary for the protection of life or property)⁴;
 - d. Natural flows, including:
 - i. Natural springs;
 - ii. Flows from riparian habitats and wetlands;
 - iii. Diverted stream flows, authorized by the State or Regional Water Board;

³ These typically include short-term, high volume discharges resulting from the development or redevelopment of groundwater extraction wells, or USEPA or State-required compliance testing of potable water treatment plants, as part of a USEPA authorized groundwater remediation action under CERCLA.

⁴ Discharges from vehicle washing, building fire suppression system maintenance and testing (e.g., sprinkler line flushing), fire hydrant maintenance and testing, and other routine maintenance activities are not considered emergency fire fighting activities.

- iv. Uncontaminated ground water infiltration⁵;
 - v. Rising ground waters, where ground water seepage is not otherwise covered by a NPDES permit⁶; or
 - e. Conditionally exempt non-storm water discharges in accordance with Parts III.A.2 and III.A.3 below.
- 2. Conditional Exemptions from Non-Storm Water Discharge Prohibition.** The following categories of non-storm water discharges are conditionally exempt from the non-storm water discharge prohibition, provided they meet all required conditions specified below, or as otherwise approved by the Regional Water Board Executive Officer, in all areas regulated by this Order with the exception of direct discharges to Areas of Special Biological Significance (ASBS) within Los Angeles County. Conditional exemptions from the prohibition on non-storm water discharges through the MS4 to an ASBS are identified in Part III.A.3 below.
- a. **Conditionally Exempt Essential Non-Storm Water Discharges:** These consist of those discharges that fall within one of the categories below; meet all required best management practices (BMPs) as specified in i. and ii. below, including those enumerated in the referenced BMP manuals; are essential public services discharge activities; and are directly or indirectly required by other state or federal statute and/or regulation:
 - i. Discharges from essential *non-emergency* fire fighting activities⁷ provided appropriate BMPs are implemented based on the CAL FIRE, Office of the State Fire Marshal's *Water-Based Fire Protection Systems Discharge Best Management Practices Manual* (September 2011) for water-based fire protection system discharges, and based on Riverside County's *Best Management Practices Plan for Urban Runoff Management* (May 1, 2004) or equivalent BMP manual for fire training activities and post-emergency fire fighting activities;
 - ii. Discharges from potable water sources, where not otherwise regulated by an individual or general NPDES permit⁸, provided appropriate BMPs are implemented based on the American Water Works Association (California-Nevada Section) *Guidelines for the Development of Your Best Management*

⁵ Uncontaminated ground water infiltration is water other than waste water that enters the MS4 (including foundation drains) from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow. (See 40 CFR § 35.2005(20).)

⁶ A NPDES permit for discharges associated with ground water dewatering is required within the Los Angeles Region.

⁷ This includes fire fighting training activities, which simulate emergency responses, and routine maintenance and testing activities necessary for the protection of life and property, including building fire suppression system maintenance and testing (e.g. sprinkler line flushing) and fire hydrant testing and maintenance. Discharges from vehicle washing are not considered essential and as such are not conditionally exempt from the non-storm water discharge prohibition.

⁸ Potable water distribution system releases means sources of flows from drinking water storage, supply and distribution systems (including flows from system failures), pressure releases, system maintenance, distribution line testing, and flushing and dewatering of pipes, reservoirs, and vaults, and minor non-invasive well maintenance activities not involving chemical addition(s) where not otherwise regulated by NPDES Permit No. CAG674001, NPDES Permit No. CAG994005, or an other separate NPDES permit.

Practices (BMP) Manual for Drinking Water System Releases (2005) or equivalent industry standard BMP manual. Additionally, each Permittee shall work with potable water suppliers that may discharge to the Permittee's MS4 to ensure for all discharges greater than 100,000 gallons: (1) notification at least 72 hours prior to a planned discharge and as soon as possible after an unplanned discharge; (2) monitoring of any pollutants of concern⁹ in the potable water supply release; and (3) record keeping by the potable water supplier for all discharges greater than one acre-foot.¹⁰ Permittees shall require that the following information is maintained by the water supplier(s) for all discharges to the MS4 (planned and unplanned) greater than 100,000 gallons: name of discharger, date and time of notification (for planned discharges), method of notification, location of discharge, discharge pathway, receiving water, date of discharge, time of the beginning and end of the discharge, duration of the discharge, flow rate or velocity, total number of gallons discharged, type of dechlorination equipment used, type of dechlorination chemicals used, concentration of residual chlorine, type(s) of sediment controls used, pH of discharge, type(s) of volumetric and velocity controls used, and field and laboratory monitoring data. Records shall be retained for five years and made available upon request by the Permittee or Regional Water Board.

- b. Those discharges that fall within one of the categories below, provided that the discharge itself is not a source of pollutants and meets all required conditions specified in Table 8 or as otherwise specified or approved by the Regional Water Board Executive Officer:
- i. Dewatering of lakes¹¹;
 - ii. Landscape irrigation;
 - iii. Dechlorinated/debrominated swimming pool/spa discharges¹², where not otherwise regulated by a separate NPDES permit;
 - iv. Dewatering of decorative fountains¹³;

⁹ Pollutants of concern may include, at a minimum, trash and debris, including organic matter, total suspended solids (TSS), residual chlorine, pH, and any pollutant for which there is a water quality-based effluent limitation in Part VI.E applicable to discharges from the MS4 to the receiving water.

¹⁰ ~~Permittees shall require that the following information is maintained by the water supplier(s) for all discharges (planned and unplanned) greater than one acre-foot: name of discharger, date and time of notification (for planned discharges), method of notification, location of discharge, discharge pathway, receiving water, date of discharge, time of the beginning and end of the discharge, duration of the discharge, flow rate or velocity, total number of gallons discharged, type of dechlorination equipment used, type of dechlorination chemicals used, concentration of residual chlorine, type(s) of sediment controls used, pH of discharge, type(s) of volumetric and velocity controls used, and field and laboratory monitoring data. Records shall be retained for five years and made available upon request by the Permittee or Regional Water Board.~~

¹¹ Dewatering of lakes does not include dewatering of drinking water reservoirs. Dewatering of drinking water reservoirs is addressed in Section III.A.2.a.ii.

¹² Conditionally exempt dechlorinated/debrominated swimming pool/spa discharges do not include swimming pool/spa filter backwash or swimming pool/spa water containing bacteria, detergents, wastes, or algaecides, or any other chemicals including salts from pools commonly referred to as "salt water pools" in excess of applicable water quality objectives.

- v. Non-commercial car washing by residents or by non-profit organizations;
 - vi. Street/sidewalk wash water¹⁴.
- 3. Conditional Exemptions from Non-Storm Water Discharge Prohibition within an ASBS.** The following non-storm water discharges ~~through~~from the MS4 directly to an ASBS are conditionally exempt pursuant to the California Ocean Plan as specified below, provided that:
- a. The discharges are essential for emergency response purposes, structural stability, slope stability or occur naturally, including the following discharges:
 - i. Discharges associated with emergency fire fighting activities (i.e., flows necessary for the protection of life or property)¹⁵;
 - ii. Foundation and footing drains;
 - iii. Water from crawl space or basement pumps;
 - iv. Hillside dewatering;
 - v. Naturally occurring ground water seepage via a MS4; and
 - vi. Non-anthropogenic flows from a naturally occurring stream via a culvert or MS4, as long as there are no contributions of anthropogenic runoff.
 - b. The discharges fall within one of the conditionally exempt essential non-storm water discharge categories in Part III.A.2.a. above.
 - c. Conditionally exempt non-storm water discharges shall not cause or contribute¹⁶ to an exceedance of applicable receiving water limitations and/or water quality-based effluent limitations in this Order or the water quality objectives in Chapter II of the Ocean Plan, or alter natural ocean water quality in an ASBS.
- 4. Permittee Requirements.** Each Permittee shall:
- a. Develop and implement procedures to ensure that a discharger, if not a named Permittee in this Order, fulfills the following for non-storm water discharges to the Permittee's MS4:

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¹³ Conditionally exempt discharges from dewatering of decorative fountains do not include fountain water containing bacteria, detergents, wastes, or algaecides, or any other chemicals in excess of applicable water quality objectives.

¹⁴ Conditionally exempt non-storm water discharges of street/sidewalk wash water only include those discharges resulting from use of high pressure, low volume spray washing using only potable water with no cleaning agents at an average usage of 0.006 gallons per square feet of sidewalk area in accordance with Regional Water Board Resolution No. 98-08. Conditionally exempt non-storm water discharges of street/sidewalk wash water do not include hosing of any sidewalk or street with a garden hose with a pressure nozzle.

¹⁵ See note 4.

¹⁶ Based on the water quality characteristics of the conditionally exempt non-storm water discharge itself.

- i. Notifies the Permittee of the planned discharge in advance, consistent with requirements in Table 8 or recommendations pursuant to the applicable BMP manual;
 - ii. Obtains any local permits required by the MS4 owner(s) and/or operator(s);
 - iii. Provides documentation that it has obtained any other necessary permits or water quality certifications¹⁷ for the discharge;
 - iv. Conducts monitoring of the discharge, if required by the Permittee;
 - v. Implements BMPs and/or control measures as specified in Table 8 or in the applicable BMP manual(s) as a condition of the approval to discharge into the Permittee's MS4; and
 - vi. Maintains records of its discharge to the MS4, consistent with requirements in Table 8 or recommendations pursuant to the applicable BMP manual. For lake dewatering, Permittees shall require that the following information is maintained by the lake owner / operator: name of discharger, date and time of notification, method of notification, location of discharge, discharge pathway, receiving water, date of discharge, time of the beginning and end of the discharge, duration of the discharge, flow rate or velocity, total number of gallons discharged, type(s) of sediment controls used, pH of discharge, type(s) of volumetric and velocity controls used, and field and laboratory monitoring data. Records shall be made available upon request by the Permittee or Regional Water Board.
- b. Develop and implement procedures that minimize the discharge of landscape irrigation water into the MS4 by promoting conservation programs.
- i. Permittees shall coordinate with the local water purveyor(s), where applicable, to promote landscape water use efficiency requirements for existing landscaping, use of drought tolerant, native vegetation, and the use of less toxic options for pest control and landscape management.
 - ii. Permittees shall develop and implement a coordinated outreach and education program to minimize the discharge of irrigation water and pollutants associated with irrigation water consistent with Part VI.D.4.c of this Order (Public Information and Participation Program).
- c. Evaluate monitoring data collected pursuant to the Monitoring and Reporting Program (MRP) of this Order (Attachment E), and any other associated data or information, and determine whether any of the authorized or conditionally exempt non-storm water discharges identified in Parts III.A.1, III.A.2, and III.A.3 above are a source of pollutants that may be causing or contributing to

¹⁷ Pursuant to the Federal Clean Water Act § 401.

an exceedance of applicable receiving water limitations in Part V and/or water quality-based effluent limitations in Part VI.E. To evaluate monitoring data, the Permittee shall either use applicable interim or final water quality-based effluent limitations for the pollutant or, if there are no applicable interim or final water quality-based effluent limitations for the pollutant, use applicable action levels provided in Attachment G. Based on non-storm water outfall-based monitoring as implemented through the MRP, if monitoring data show exceedances of applicable water quality-based effluent limitations or action levels, the Permittee shall take further action to determine whether the discharge is causing or contributing to exceedances of receiving water limitations in Part V.

- d. If the Permittee determines that any of the conditionally exempt non-storm water discharges identified in Part III.A.2.b above is a source of pollutants that causes or contributes to an exceedance of applicable receiving water limitations and/or water quality-based effluent limitations, the Permittee(s) shall report its findings to the Regional Water Board in its annual report. Based on this determination, the Permittee(s) shall also either:
 - i. Effectively prohibit¹⁸ the non-storm water discharge to the MS4; or
 - ii. Impose conditions in addition to those in Table 8, subject to approval by the Regional Water Board Executive Officer, on the non-storm water discharge such that it will not be a source of pollutants; or
 - iii. Provide for diversion of the non-storm water discharge to the sanitary sewer; or
 - iv. Provide treatment of the non-storm water discharge prior to discharge to the receiving water.
- e. If the Permittee determines that any of the authorized or conditionally exempt essential non-storm water discharges identified in Parts III.A.1.a through III.A.1.c, III.A.2.a, or III.A.3 above is a source of pollutants that causes or contributes to an exceedance of applicable receiving water limitations and/or water quality-based effluent limitations, the Permittee shall notify the Regional Water Board within 30 days if the non-storm water discharge is an authorized discharge with coverage under a separate NPDES permit or authorized by USEPA under CERCLA in the manner provided in Part III.A.1.b above, or a conditionally exempt essential non-storm water discharge or emergency non-storm water discharge.
- f. If the Permittee prohibits the discharge from the MS4, as per Part III.A.4.d.i, then the Permittee shall implement procedures developed under Part VI.D.9

¹⁸ To "effectively prohibit" means to not allow the non-storm water discharge through the MS4 unless the discharger obtains coverage under a separate NPDES permit prior to discharge to the MS4.

(Illicit Connections and Illicit Discharges Elimination Program) in order to eliminate the discharge to the MS4.

5. If a Permittee demonstrates that the water quality characteristics of a specific authorized or conditionally exempt essential non-storm water discharge resulted in an exceedance of applicable receiving water limitations and/or water quality-based effluent limitations during a specific sampling event, the Permittee shall not be found in violation of applicable receiving water limitations and/or water quality-based effluent limitations for that specific sampling event. Such demonstration must be based on source specific water quality monitoring data from the authorized or conditionally exempt essential non-storm water discharge ~~and or~~ other relevant information documenting the characteristics of regarding the specific non-storm water discharge as identified in Table 8.
6. Notwithstanding the above, the Regional Water Board Executive Officer, based on an evaluation of monitoring data and other relevant information for specific categories of non-storm water discharges, may modify a category or remove categories of conditionally exempt non-storm water discharges from Parts III.A.2 and III.A.3 above if the Executive Officer determines that a discharge category is a source of pollutants that causes or contributes to an exceedance of applicable receiving water limitations and/or water quality-based effluent limitations, or may require that a discharger obtain coverage under a separate individual or general State or Regional Water Board permit for a non-storm water discharge.

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Table 8. Required Conditions for Conditionally Exempt Non-Storm Water Discharges

Discharge Category	General Conditions Under Which Discharge Through the MS4 is Allowed	Conditions/BMPs that are Required to be Implemented Prior to Discharge Through the MS4
All Discharge Categories	See discharge specific conditions below.	<p>Ensure Segregate conditionally exempt non-storm water discharges from avoid potential sources of pollutants <u>in the flow path</u> to prevent introduction of pollutants to the MS4 and receiving water.</p> <p>Whenever there is a discharge of one acre-foot 100,000 gallons or more into the MS4, the Los Angeles County Flood Control District Permittees shall require advance notification by the discharger to the potentially affected MS4 Permittees, including at a minimum the District LACFCD, if applicable, and the Permittee with jurisdiction over the land area from which the discharge originates.</p>
Dewatering of lakes	Discharge allowed only if all necessary permits/water quality certifications for dredge and fill activities, including water diversions, are obtained prior to discharge.	<p>Ensure procedures for advanced notification by the lake owner / operator to the Permittee(s) no less than 72 hours prior to the planned discharge.</p> <p>Immediately prior to discharge, visible trash on the shoreline or on the surface of the lake shall be removed and disposed of in a legal manner.</p> <p>Immediately prior to discharge, the discharge pathway, and the MS4 inlet to which the discharge is directed, <u>and the MS4 outlet from which the water will be discharged to the receiving water,</u> shall be inspected and cleaned out.</p> <p>Discharges shall be volumetrically and velocity controlled to minimize resuspension of sediments.</p> <p>Measures shall be taken to stabilize lake bottom sediments.</p> <p>Ensure procedures for water quality monitoring for pollutants of concern¹⁹ in the lake.</p> <p>Ensure record-keeping of lake dewatering by the lake owner / operator.²⁰</p>

¹⁹ Pollutants of concern include, at a minimum, trash and debris, including organic matter, TSS, and any pollutant for which there is a water quality-based effluent limitation in Part VI.E for the lake and/or receiving water.

²⁰ ~~Permittees shall require that the following information is maintained by the lake owner / operator: name of discharger, date and time of notification, method of notification, location of discharge, discharge pathway, receiving water, date of discharge, time of the beginning and end of the discharge, duration of the discharge, flow rate or velocity, total number of gallons discharged, type(s) of sediment controls used, pH of discharge, type(s) of volumetric and velocity controls used, and field and laboratory monitoring data. Records shall be made available upon request by the Permittee or Regional Water Board.~~

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<p>Landscape irrigation using potable water</p>	<p>Discharge allowed if runoff due to potable landscape irrigation is minimized through the implementation of an ordinance specifying water efficient landscaping standards, as well as an outreach and education program focusing on water conservation and landscape water use efficiency.</p>	<p>Implement BMPs to minimize runoff and prevent introduction of pollutants to the MS4 and receiving water. Implement water conservation programs to minimize discharge by using less water.</p>
<p>Landscape irrigation using reclaimed or recycled water</p>	<p>Discharge of reclaimed or recycled water runoff from landscape irrigation is allowed if the discharge is in compliance with the producer and distributor operations and management (O&M) plan, and all relevant portions thereof, including the Irrigation Management Plan.</p>	<p>Discharges must comply with applicable O&M Plans, and all relevant portions thereof, including the Irrigation Management Plan.</p>

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<p>Dechlorinated/ debrominated swimming pool/spa discharges</p>	<p>Discharges allowed after implementation of specified BMPs.</p> <p>Pool or spa water containing copper-based algaecides is not allowed to be discharged to the MS4.</p> <p>Discharges of cleaning waste water and filter backwash allowed only if authorized by a separate NPDES permit.</p>	<p>Implement BMPs and segregate <u>ensure</u> discharge from <u>avoids</u> potential sources of pollutants <u>in the flow path</u> to prevent introduction of pollutants prior to discharge to the MS4 and receiving water.</p> <p>Swimming pool water must be dechlorinated or debrominated using holding time, aeration, and/or sodium thiosulfate. Chlorine residual in the discharge shall not exceed 0.1 mg/L.</p> <p>Swimming pool water shall not contain any detergents, wastes, or algaecides, or any other chemicals including salts from pools commonly referred to as “salt water pools” in excess of applicable water quality objectives.²¹</p> <p>Swimming pool discharges are to be pH adjusted, if necessary, and be within the range of 6.5 and 8.5 standard units.</p> <p>Swimming pool discharges shall be volumetrically and velocity controlled to promote evaporation and/or infiltration.</p> <p>Ensure procedures for advanced notification by the pool owner to the Permittee(s) at least 72 hours prior to planned discharge for discharges of one acre-foot <u>100,000 gallons</u> or more.</p> <p>II. Immediately prior to discharge, the discharge pathway, <u>and</u> the MS4 inlet to which the discharge is directed, and the MS4 outlet from which the water will be discharged to the receiving water, shall be inspected and cleaned out.</p>
<p>Dewatering of decorative fountains</p>	<p>Discharges allowed after implementation of specified BMPs.</p> <p>Fountain water containing copper-based algaecides may not be discharged to the MS4.</p> <p>Fountain water containing dyes may not be discharged to the MS4.</p>	<p>Implement BMPs and segregate <u>ensure</u> discharge <u>avoids</u> from potential sources of pollutants <u>in the flow path</u> to prevent introduction of pollutants prior to discharge to the MS4 and receiving water.</p> <p>Fountain water must be dechlorinated or debrominated using holding time, aeration, and/or sodium thiosulfate. Chlorine residual in the discharge shall not exceed 0.1 mg/L.</p> <p>Fountain discharges are to be pH adjusted, if necessary, and be within the range of 6.5 and 8.5 standard units.</p> <p>Fountain discharges shall be volumetrically and velocity controlled to promote evaporation and/or infiltration.</p> <p>Ensure procedures for advanced notification by the fountain owner to the Permittee(s) at least 72 hours prior to planned discharge for discharges of one acre-foot <u>100,000 gallons</u> or more.</p> <p>III. Immediately prior to discharge, the discharge pathway, <u>and</u> the MS4 inlet to which the discharge is directed, and the MS4 outlet from which the water will be discharged to the receiving</p>

²¹ Applicable mineral water quality objectives for surface waters are contained in Chapter 3 of the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties.

		water, shall be inspected and cleaned out.
Non-commercial car washing by residents or by non-profit organizations	Discharges allowed after implementation of specified BMPs.	<p>Implement BMPs and segregate ensure discharge avoids from potential sources of pollutants <u>in the flow path</u> to prevent introduction of pollutants prior to discharge to the MS4 and receiving water.</p> <p>Minimize the amount of water used by employing water conservation practices such as turning off nozzles or kinking the hose when not spraying a car, and using a low volume pressure washer.</p> <p>Encourage use of biodegradable, phosphate free detergents and non-toxic cleaning products.</p> <p>Where possible, wash cars on a permeable surface where wash water can percolate into the ground (e.g. gravel or grassy areas).</p> <p>Empty buckets of soapy or rinse water into the sanitary sewer system (e.g., sinks or toilets).</p>
Street/sidewalk wash water	Discharges allowed after implementation of specified BMPs.	<p>Sweeping should be used as an alternate BMP whenever possible and sweepings should be disposed of in the trash.</p> <p>BMPs shall be in accordance with Regional Water Board Resolution No. 98-08 that requires: 1) removal of trash, debris, and free standing oil/grease spills/leaks (use absorbent material if necessary) from the area before washing and 2) use of high pressure, low volume spray washing using only potable water with no cleaning agents at an average usage of 0.006 gallons per square feet of sidewalk area. In areas of unsanitary conditions (e.g., areas where the congregation of transient populations can reasonably be expected to result in a significant threat to water quality), whenever practicable, Permittees shall collect and divert street and alley wash water from the Permittee's street and sidewalk cleaning public agency activities to the sanitary sewer.</p>

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IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**A. Effluent Limitations**

1. **Technology Based Effluent Limitations:** Each Permittee shall reduce pollutants in storm water discharges from the MS4 to the maximum extent practicable (MEP).
2. **Water Quality-Based Effluent Limitations (WQBELs).** This Order establishes WQBELs consistent with the assumptions and requirements of all available TMDL waste load allocations assigned to discharges from the Los Angeles County Permittees' MS4s.
 - a. Each Permittee shall comply with applicable WQBELs as set forth in Part VI.E of this Order, pursuant to applicable compliance schedules.

B. Land Discharge Specifications – Not Applicable**C. Reclamation Specifications – Not Applicable****V. RECEIVING WATER LIMITATIONS****A. Receiving Water Limitations**

1. Discharges from the MS4 that cause or contribute to the violation of receiving water limitations are prohibited.
2. Discharges from the MS4 of storm water, or non-storm water, for which a Permittee is responsible²², shall not cause or contribute to a condition of nuisance.
3. The Permittees shall comply with Parts V.A.1 and V.A.2 through timely implementation of control measures and other actions to reduce pollutants in the discharges in accordance with the storm water management program and its components and other requirements of this Order including any modifications. The storm water management program and its components shall be designed to achieve compliance with receiving water limitations. If exceedances of receiving water limitations persist, notwithstanding implementation of the storm water management program and its components and other requirements of this Order, the Permittee shall assure compliance with discharge prohibitions and receiving water limitations by complying with the following procedure:
 - a. Upon a determination by either the Permittee or the Regional Water Board that discharges from the MS4 are causing or contributing to an exceedance of an applicable Receiving Water Limitation, the Permittee shall promptly notify²³ and thereafter submit an Integrated Monitoring Compliance Report (as described in the Program Reporting Requirements, Part XVIII.A.5 of the Monitoring and

²² Pursuant to 40 CFR § 122.26(a)(3)(vi), a Permittee is only responsible for discharges of storm water and non-storm water from the MS4 for which it is an owner or operator.

²³ Within 30 days of receipt of analytical results from the sampling event.

- Reporting Program) to the Regional Water Board for approval. The Integrated Monitoring Compliance shall describe the BMPs that are currently being implemented by the Permittee and additional BMPs, including modifications to current BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the exceedances of receiving water limitations. The Integrated Monitoring Compliance Report shall include an implementation schedule. This Integrated Monitoring Compliance Report shall be incorporated in the annual Storm Water Report unless the Regional Water Board directs an earlier submittal. The Regional Water Board may require modifications to the Integrated Monitoring Compliance Report.
- b. The Permittee shall submit any modifications to the Integrated Monitoring Compliance Report required by the Regional Water Board within 30 days of notification.
 - c. Within 30 days following the Regional Water Board Executive Officer's approval of the Integrated Monitoring Compliance Report, the Permittee shall revise the storm water management program and its components and monitoring program to incorporate the approved modified BMPs that have been and will be implemented, an implementation schedule, and any additional monitoring required.
 - d. The Permittee shall implement the revised storm water management program and its components and monitoring program according to the approved implementation schedule.
4. So long as the Permittee has complied with the procedures set forth in Part V.A.3. above and is implementing the revised storm water management program and its components, the Permittee does not have to repeat the same procedure for continuing or recurring exceedances of the same receiving water limitations unless directed by the Regional Water Board to modify current BMPs or develop additional BMPs.

B. Ground Water Limitations – Not Applicable

VI. PROVISIONS

A. Standard Provisions

1. **Federal Standard Provisions.** Each Permittee shall comply with all Standard Provisions included in Attachment D of this Order, in accordance with 40 CFR sections 122.41 and 122.42.
2. **Legal Authority**
 - a. Each Permittee must establish and maintain adequate legal authority, within its respective jurisdiction, to control pollutant discharges into and from its MS4

through ordinance, statute, permit, contract or similar means. This legal authority must, at a minimum, authorize or enable the Permittee to:

- i. Control the contribution of pollutants to its MS4 from storm water discharges associated with industrial and construction activity and control the quality of storm water discharged from industrial and construction sites. This requirement applies both to industrial and construction sites with coverage under an NPDES permit, as well as to those sites that do not have coverage under an NPDES permit. Grading ordinances must be updated and enforced as necessary to comply with this Order;
- ii. Prohibit all non-storm water discharges through the MS4 to receiving waters not otherwise authorized or conditionally exempt pursuant to Part III.A;
- iii. Prohibit and eliminate illicit discharges and illicit connections to the MS4;
- iv. Control the discharge of spills, dumping, or disposal of materials other than storm water to its MS4;
- v. Require compliance with conditions in Permittee ordinances, permits, contracts or orders (i.e., hold dischargers to its MS4 accountable for their contributions of pollutants and flows);
- vi. Utilize enforcement mechanisms to require compliance with applicable ordinances, permits, contracts, or orders;
- vii. Control the contribution of pollutants from one portion of the shared MS4 to another portion of the MS4 through interagency agreements among Co-permittees;
- viii. Control of the contribution of pollutants from one portion of the shared MS4 to another portion of the MS4 through interagency agreements with other owners of the MS4 such as the State of California Department of Transportation;
- ix. Carry out all inspections, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with applicable municipal ordinances, permits, contracts and orders, and with the provisions of this Order, including the prohibition of non-storm water discharges into the MS4 and receiving waters. This means the Permittee must have authority to enter, monitor, inspect, take measurements, review and copy records, and require regular reports from entities discharging into its MS4;
- x. Require the use of control measures to prevent or reduce the discharge of pollutants to achieve water quality standards/receiving water limitations;
- xi. Require that structural BMPs are properly operated and maintained; and

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- xii. Require documentation on the operation and maintenance of structural BMPs and their effectiveness in reducing the discharge of pollutants to the MS4.
- b. Each Permittee must submit a statement certified by its chief legal counsel that the Permittee has the legal authority within its jurisdiction to implement and enforce each of the requirements contained in 40 CFR § 122.26(d)(2)(i)(A-F) and this Order. Each Permittee shall submit this certification annually as part of its Annual Report beginning with the first Annual Report required under this Order. These statements must include:
- i. Citation of applicable municipal ordinances or other appropriate legal authorities and their relationship to the requirements of 40 CFR § 122.26(d)(2)(i)(A)-(F) and of this Order; and
 - ii. Identification of the local administrative and legal procedures available to mandate compliance with applicable municipal ordinances identified in subsection (i) above and therefore with the conditions of this Order, and a statement as to whether enforcement actions can be completed administratively or whether they must be commenced and completed in the judicial system.

3. Fiscal Resources

- ~~a. Each Permittee shall exercise its full authority to secure the fiscal resources necessary to meet all requirements of this Order.~~
- a. Each Permittee shall conduct a fiscal analysis of the annual capital and operation and maintenance expenditures necessary to implement the requirements of this Order. Each Permittee shall submit its fiscal analysis with its Report of Waste Discharge.
- b. Each Permittee shall also include enumerate and describe in its Annual Report a description of the source(s) of funds used in the past year, and proposed for the coming year, to meet necessary expenditures on the Permittee's storm water management program.
- ~~c. Each Permittee shall conduct a fiscal analysis of the annual capital and operation and maintenance expenditures necessary to implement the requirements of this Order. Each Permittee shall submit its fiscal analysis with its Report of Waste Discharge.~~

4. Responsibilities of the Permittees

- a. Each Permittee is required to comply with the requirements of this Order applicable to discharges within its boundaries. Permittees are not responsible for the implementation of the provisions applicable to other Permittees. Each Permittee shall:

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- i. Comply with the requirements of this Order and any modifications thereto.
- ii. Coordinate among its internal departments and agencies, as necessary, to facilitate the implementation of the requirements of this Order applicable to such Permittees in an efficient and cost-effective manner.
- iii. Participate in intra-agency coordination (e.g. Planning Department, Fire Department, Building and Safety, Code Enforcement, Public Health, Parks and Recreation, and others) and inter-agency coordination (e.g. co-Permittees, other NPDES permittees) necessary to successfully implement the provisions of this Order.

5. Public Review

- a. All documents submitted to the Regional Water Board in compliance with the terms and conditions of this Order shall be made available to members of the public pursuant to the Freedom of Information Act (5 U.S.C. § 552 (as amended)) and the Public Records Act (Cal. Government Code § 6250 et seq.).
- b. All documents submitted to the Regional Water Board Executive Officer for approval shall be made available to the public for a 30-day period to allow for public comment.

6. Regional Water Board Review

Any formal determination or approval made by the Regional Water Board Executive Officer pursuant to the provisions of this Order may be reviewed by the Regional Water Board. A Permittee(s) or a member of the public may request such review upon petition within 30 days of the effective date of the notification of such decision to the Permittee(s) and interested parties on file at the Regional Water Board.

7. Reopener and Modification

- a. This Order may be modified, revoked, reissued, or terminated in accordance with the provisions of 40 CFR sections 122.44, 122.62, 122.63, 122.64, 124.5, 125.62, and 125.64. Causes for taking such actions include, but are not limited to:
 - i. Endangerment to human health or the environment resulting from the permitted activity, including information that the discharge(s) regulated by this Order may have the potential to cause or contribute to adverse impacts on water quality and/or beneficial uses;
 - ii. Acquisition of newly-obtained information that would have justified the application of different conditions if known at the time of Order adoption;

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- iii. To address changed conditions identified in required reports or other sources deemed significant by the Regional Water Board;
 - iv. To incorporate provisions as a result of future amendments to the Basin Plan, such as a new or revised water quality objective or the adoption or reconsideration of a TMDL, including the program of implementation. Within 18 months of the effective date of a revised TMDL or as soon as practicable thereafter, where the revisions warrant a change to the provisions of this Order, the Regional Water Board may modify this Order consistent with the assumptions and requirements of the revised WLA(s), including the program of implementation;
 - v. To incorporate provisions as a result of new or amended statewide water quality control plans or policies adopted by the State Water Board, or in consideration of any State Water Board action regarding the precedential language of State Water Board Order WQ 99-05;
 - vi. To incorporate provisions as a result of the promulgation of new or amended federal or state laws or regulations, USEPA guidance concerning regulated activities, or judicial decisions that becomes effective after adoption of this Order.
 - vii. To incorporate effluent limitations for toxic constituents determined to be present in significant amount in the discharge through a more comprehensive monitoring program included as part of this Order and based on the results of the reasonable potential analysis; ~~and/or~~
 - viii. In accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include requirements for the implementation of the watershed management approach or to include new Minimum Levels (MLs); and/or
 - ~~viii.~~ ix. To include provisions or modifications to WQBELs in Part VI.E and Attachments L-R in this Order prior to the final compliance deadlines, if practicable, that would allow an action-based, BMP compliance demonstration approach with regard to final WQBELs for storm water discharges based on the Regional Board's review of relevant research, including but not limited to data and information provided by Permittees, on storm water quality and control technologies.
- b. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
- i. Violation of any term or condition contained in this Order;
 - ii. Obtaining this Order by misrepresentation, or failure to disclose all relevant facts; or

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- iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
 - c. The filing of a request by a Permittee for a modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.
 - d. This Order may be modified to make corrections or allowances for changes in the permitted activity, following the procedures at 40 CFR section 122.63, if processed as a minor modification. Minor modifications may only:
 - i. Correct typographical errors; or
 - ii. Require more frequent monitoring or reporting by a Permittee.
- 8. Any discharge of waste to any point(s) other than specifically described in this Order is prohibited, and constitutes a violation of this Order.
- 9. A copy of this Order shall be maintained by each Permittee so as to be available during normal business hours to Permittee employees responsible for implementation of the provisions of this Order and members of the public.
- 10. The discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act to any waste stream that may ultimately be released to waters of the United States, is prohibited, unless specifically authorized elsewhere in this Order or another NPDES permit. This requirement is not applicable to products used for lawn and agricultural purposes.
- 11. The discharge of any waste resulting from the combustion of toxic or hazardous wastes to any waste stream that ultimately discharges to waters of the United States is prohibited, unless specifically authorized elsewhere in this Order.
- 12. Oil or oily material, chemicals, refuse, or other pollutionable materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried off of the property and/or discharged to surface waters. Any such spill of such materials shall be contained and removed immediately.
- 13. If there is any storage of hazardous or toxic materials or hydrocarbons at a facility owned and/or operated by a Permittee and if the facility is not manned at all times, a 24-hour emergency response telephone number shall be prominently posted where it can easily be read from the outside.

14. Enforcement

- a. Violation of any of the provisions of this Order may subject the violator to any of the penalties described herein or in Attachment D of this Order, or any combination thereof, at the discretion of the prosecuting authority; except that only one kind of penalty may be applied for each kind of violation.

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- b.** Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges through the MS4 to receiving waters, may subject a Permittee to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject a Permittee to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.
- c.** The California Water Code provides that any person who violates a waste discharge requirement or a provision of the California Water Code is subject to civil penalties of up to \$5,000 per day, \$10,000 per day, or \$25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to \$10 per gallon per day or \$25 per gallon per day of violation; or some combination thereof, depending on the violation, or upon the combination of violations.
- d.** California Water Code section 13385(h)(1) requires the Regional Water Board to assess a mandatory minimum penalty of three-thousand dollars (\$3,000) for each serious violation. Pursuant to California Water Code section 13385(h)(2), a “serious violation” is defined as any waste discharge that violates the effluent limitations contained in the applicable waste discharge requirements for a Group II pollutant by 20 percent or more, or for a Group I pollutant by 40 percent or more. Appendix A of 40 CFR section 123.45 specifies the Group I and II pollutants. Pursuant to California Water Code section 13385.1(a)(1), a “serious violation” is also defined as “a failure to file a discharge monitoring report required pursuant to Section 13383 for each complete period of 30 days following the deadline for submitting the report, if the report is designed to ensure compliance with limitations contained in waste discharge requirements that contain effluent limitations.”
- e.** California Water Code section 13385(i) requires the Regional Water Board to assess a mandatory minimum penalty of three-thousand dollars (\$3,000) for each violation whenever a person violates a waste discharge requirement effluent limitation in any period of six consecutive months, except that the requirement to assess the mandatory minimum penalty shall not be applicable to the first three violations within that time period.
- f.** Pursuant to California Water Code section 13385.1(d), for the purposes of section 13385.1 and subdivisions (h), (i), and (j) of section 13385, “effluent limitation” means a numeric restriction or a numerically expressed narrative restriction, on the quantity, discharge rate, concentration, or toxicity units of a pollutant or pollutants that may be discharged from an authorized location. An effluent limitation may be final or interim, and may be expressed as a prohibition. An effluent limitation, for these purposes, does not include a receiving water limitation, a compliance schedule, or a best management practice.
- g.** Unlike subdivision (c) of California Water Code section 13385, where violations of effluent limitations may be assessed administrative civil liability on a per day

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basis, the mandatory minimum penalties provisions identified above require the Regional Water Board to assess mandatory minimum penalties for “each violation” of an effluent limitation. Some water quality-based effluent limitations in Attachments L through R of this Order (e.g., trash, as described immediately below) are expressed as annual effluent limitations. Therefore, for such limitations, there can be no more than one violation of each interim or final effluent limitation per year.

h. Trash TMDLs.

i. Consistent with the 2009 amendments to Order No. 01-182 to incorporate the Los Angeles River Trash TMDL, the water quality-based effluent limitations in Attachments L through R of this Order for trash are expressed as annual effluent limitations. Therefore, for such limitations, there can be no more than one violation of each interim or final effluent limitation per year. Trash is considered a Group I pollutant, as specified in Appendix A to 40 CFR section 123.45. Therefore, each annual violation of a trash effluent limitation in Attachments L through R of this Order by forty percent or more would be considered a “serious violation” under California Water Code section 13385(h). With respect to the final effluent limitation of zero trash, any detectable discharge of trash necessarily is a serious violation, in accordance with the State Water Board’s Enforcement Policy. Violations of the effluent limitations in Attachments L through R of this Order would not constitute “chronic” violations that would give rise to mandatory liability under California Water Code section 13385(i) because four or more violations of the effluent limitations subject to a mandatory penalty cannot occur in a period of six consecutive months.

ii.—For the purposes of enforcement under California Water Code section 13385, subdivisions (a), (b), and (c), not every storm event may result in trash discharges. In trash TMDLs adopted by the Regional Water Board, the Regional Water Board states that improperly deposited trash is mobilized during storm events of greater than 0.25 inches of precipitation. Therefore, violations of the effluent limitations are limited to the days of a storm event of greater than 0.25 inches. Once a Permittee has violated the annual effluent limitation, any subsequent discharges of trash during any day of a storm event of greater than 0.25 inches during the same storm year constitutes an additional “day in which the violation [of the effluent limitation] occurs”.

ii.

15. This Order does not exempt any Permittee from compliance with any other laws, regulations, or ordinances that may be applicable.

16. The provisions of this Order are severable. If any provisions of this Order or the application of any provision of this Order to any circumstance is held invalid, the

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application of such provision to other circumstances and the remainder of this Order shall not be affected.

16.

B. Monitoring and Reporting Program (MRP) Requirements

Dischargers shall comply with the MRP and future revisions thereto, in Attachment E of this Order or may, in coordination with an approved Watershed Management Program per Part VI.C, implement a customized monitoring program that achieves the five Primary Objectives set forth in Part II.A. of Attachment E and includes the elements set forth in Part II.E. of Attachment E.

C. Watershed Management Programs

1. General

- a. The purpose of this Part VI.C is to allow Permittees the flexibility to develop Watershed Management Programs to implement the requirements of this Order on a watershed scale through customized strategies, control measures, and BMPs.
- b. Participation in a Watershed Management Program is voluntary and allows a Permittee to address the highest watershed priorities, including complying with the requirements of Part V.A. (Receiving Water Limitations), Part VI.E (Total Maximum Daily Load Provisions) and Attachments L through R, to by customize customizing the requirements control measures in Parts III.A.4 (Prohibitions – Non-Storm Water Discharges) and VI.D (Minimum Control Measures) to address the highest watershed priorities, including achieving compliance with the requirements of Part VI.E (Total Maximum Daily Load Provisions) and Attachments L through R.
- c. Customized strategies, control measures, and BMPs shall be implemented on a watershed basis, where applicable, through each Permittee's storm water management program and/or collectively by all participating Permittees through a Watershed Management Program.
- d. ~~The goal of the Watershed Management Programs is to~~ shall ensure that discharges from the Los Angeles County Permittees' MS4s: (i) achieve applicable water quality-based effluent limitations in Part VI.E and Attachments L through R pursuant to the corresponding compliance schedules, (ii) do not cause or contribute to exceedances of receiving water limitations in Parts V.A and VI.E and Attachments L through R, and (iii) do not include non-storm water discharges that are effectively prohibited pursuant to Part III.A. cause exceedances of non-storm water action levels in Attachment G. The programs shall also ensure that controls are implemented to reduce the discharge of pollutants to the maximum extent practicable (MEP) pursuant to Part IV.A.1.

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- e. Watershed Management Programs shall be developed either collaboratively or individually using the Regional Water Board's Watershed Management Areas (WMAs). Where appropriate, WMAs may be separated into subwatersheds to focus water quality prioritization and implementation efforts by receiving water.
- f. Each Watershed Management Program shall be consistent with Part VI.C.5-C.8 and shall:
- i. Prioritize water quality issues resulting from storm water and non-storm water discharges from the MS4 to receiving waters within each WMA,
 - ii. Identify and implement strategies, control measures, and BMPs to achieve the outcomes specified in Part VI.C.1.d~~applicable water quality-based effluent limitations, receiving water limitations, and/or non-storm water action levels consistent with corresponding compliance schedules in this Order,~~
 - iii. Execute an integrated monitoring program and assessment program pursuant to ~~the~~ Attachment E – MRP, Part IV to determine progress towards achieving applicable limitations and/or action levels in Attachment G, and
 - iv. Revise/Modify strategies, control measures, and BMPs as necessary based on analysis of monitoring data collected pursuant to the MRP to ensure that to maintain progress towards achieving applicable water quality-based effluent limitations and receiving water limitations and other milestones set forth in the Watershed Management Program will be achieved~~or action levels in Attachment G.~~
- g. Permittees may elect to develop an enhanced Watershed Management Program. An enhanced Watershed Management Program is one that comprehensively evaluates opportunities, within the participating Permittees' collective jurisdictional area in a Watershed Management Area, for collaboration among Permittees and other partners on multi-benefit regional projects to control MS4 discharges of storm water by, wherever feasible, retaining the 85th percentile, 24-hour storm event for the drainage areas tributary to the projects, while also achieving other benefits including flood control and water supply, among others. Where retention of the 85th percentile, 24-hour storm event is not feasible, the enhanced Watershed Management Program shall include a Reasonable Assurance Analysis to demonstrate that applicable water quality based effluent limitations and receiving water limitations shall be achieved through implementation of other watershed control measures. An enhanced Watershed Management Program shall:
- i. Be consistent with the provisions in Part VI.C.1.a-f and VI.C.5-C.8;
 - ii. Incorporate applicable State agency input on priority setting and other key implementation issues;

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- iii. Provide for meeting water quality standards and other CWA obligations by utilizing provisions in the CWA and its implementing regulations, policies and guidance;
- iv. Maximize retention through infiltration or capture and reuse of the storm water volume from the 85th percentile, 24-hour storm within the area covered by the enhanced Watershed Management Program;
- v. Maximize the effectiveness of funds through analysis of alternatives and the selection and sequencing of actions needed to address human health and water quality related challenges and non-compliance;
- vi. Incorporate effective innovative technologies, approaches and practices, including green infrastructure;
- vii. Ensure that existing requirements to comply with technology-based effluent limitations and core requirements (e.g., including elimination of non-storm water discharges of pollutants through the MS4, and controls to reduce the discharge of pollutants in storm water to the maximum extent practicable) are not delayed;
- viii. Ensure that a financial strategy is in place; and
- iv-ix. Provide appropriate opportunity for meaningful stakeholder input throughout the development of the enhanced Watershed Management Program, including the formation of a Technical Advisory Committee (TAC) that will advise and participate in the development of the enhanced Watershed Management Programs from month 6 through the date of program approval. The composition of the TAC may include at least one Permittee representative from each Watershed Management Area for which an enhanced Watershed Management Program will be developed and a minimum of one public representative from a non-governmental organization with public membership.

2. Compliance with Receiving Water Limitations Not Otherwise Addressed by a TMDL

- a. For receiving water limitations in Part V.A. associated with water body-pollutant combinations not addressed through a TMDL, but which a Permittee elects to address through a Watershed Management Program or enhanced Watershed Management Program as set forth in this Part VI.C., a Permittee shall comply as follows:

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i. For pollutants that are in the same class²⁴ as those addressed in a TMDL for the watershed and for which the water body is identified as impaired on the State's Clean Water Act Section 303(d) List as of the effective date of this Order:

- (1) Permittees shall demonstrate that the Watershed Control Measures to achieve the applicable TMDL provisions identified pursuant to Part VI.C.5.b.iv.(3) will also adequately address contributions of the pollutant(s) within the same class from MS4 discharges to receiving waters, consistent with the assumptions and requirements of the corresponding TMDL provisions, including interim and final requirements and deadlines for their achievement, such that the MS4 discharges of the pollutant(s) will not cause or contribute to exceedances of receiving water limitations in Part V.A.
- (2) Permittees shall include the water body-pollutant combination(s) in the Reasonable Assurance Analysis in Part VI.C.5.b.iv.(5).
- (3) Permittees shall identify milestones and dates for their achievement consistent with those in the corresponding TMDL.

ii. For pollutants that are not in the same class as those addressed in a TMDL for the watershed, but for which the water body is identified as impaired on the State's Clean Water Act Section 303(d) List as of the effective date of this Order:

- (1) Permittees shall assess contributions of the pollutant(s) from MS4 discharges to the receiving waters and sources of the pollutant(s) within the drainage area of the MS4 pursuant to Part VI.C.5.a.iii.
- (2) Permittees shall identify Watershed Control Measures pursuant to Part VI.C.5.b. that will adequately address contributions of the pollutant(s) from MS4 discharges to receiving waters such that the MS4 discharges of the pollutant(s) will not cause or contribute to exceedances of receiving water limitations in Part V.A.
- (3) Permittees shall include the water body-pollutant in the Reasonable Assurance Analysis in Part VI.C.5.b.iv.(5).
- (4) Permittees shall identify enforceable requirements and milestones and dates for their achievement within a timeframe that is as short as possible, taking into account the technological, operation, and economic factors that affect the design, development, and implementation of the control measures that are necessary. The time between dates shall not exceed one year. Milestones shall relate to a specific water quality endpoint (e.g., x% of the MS4 drainage area is meeting the receiving water limitations) and dates shall relate either to taking a specific action or meeting a milestone.

²⁴ Pollutants are considered in a similar class if they have similar fate and transport mechanisms, can be addressed via the same types of control measures, and within the same timeline already contemplated as part of the Watershed Management Program for the TMDL.

iii. For pollutants for which there are exceedances of receiving water limitations in Part V.A., but for which the water body is not identified as impaired on the State’s Clean Water Act Section 303(d) List as of the effective date of this Order:

(1) Upon an exceedance of a receiving water limitation, based on data collected pursuant to the MRP and approved IMPs and CIMPs, Permittees shall assess contributions of the pollutant(s) from MS4 discharges to the receiving waters and sources of the pollutant(s) within the drainage area of the MS4 pursuant to Part VI.C.5.a.iii.

(2) If MS4 discharges are identified as a source of the pollutant(s) that has caused or contributed to, or has the potential to cause or contribute to, the exceedance(s) of receiving water limitations in Part V.A., Permittees shall address contributions of the pollutant(s) from MS4 discharges through modifications to the WMP or Integrated Program pursuant to Part VI.C.8.a.ii.

(a) In a modified WMP, Permittees shall identify Watershed Control Measures pursuant to Part VI.C.5.b. that will adequately address contributions of the pollutant(s) from MS4 discharges to receiving waters such that the MS4 discharges of the pollutant(s) will not cause or contribute to exceedances of receiving water limitations in Part V.A.

(b) Permittees shall modify the Reasonable Assurance Analysis pursuant to Part VI.C.5.b.iv.(5) to address the pollutant(s).

(c) Permittees shall identify enforceable requirements and milestones and dates for their achievement to address the pollutant(s) within a timeframe that is as short as possible, taking into account the technological, operation, and economic factors that affect the design, development, and implementation of the control measures that are necessary. The time between dates shall not exceed one year. Milestones shall relate to a specific water quality endpoint (e.g., x% of the MS4 drainage area is meeting the receiving water limitations) and dates shall relate either to taking a specific action or meeting a milestone.

b. A Permittee’s full compliance with all requirements and dates for their achievement in an approved Watershed Management Program or enhanced Watershed Management Program shall constitute compliance with receiving water limitations in Part V.A. of this Order for the specific water body-pollutant combinations addressed by an approved Watershed Management Program or enhanced Watershed Management Program.

c. If a Permittee fails to meet any requirement or date for its achievement in an approved Watershed Management Program or enhanced Watershed Management Program, the Permittee shall be subject to the provisions of Part V.A. for the waterbody-pollutant combination(s) that were to be addressed by the requirement.

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3. Receiving Water Limitations Addressed by a TMDL

a. A Permittee’s full compliance with all requirements and dates for their achievement in an approved Watershed Management Program or enhanced Watershed Management Program shall constitute compliance with applicable interim water quality based effluent limitations and interim receiving water limitations pursuant to Part VI.E. and Attachments L-R for the pollutant(s) addressed by the approved Watershed Management Program.

2.4. Process

a. Timelines for Implementation

i. Each Permittee shall ensure implementation of the following requirements per the schedule specified in Table 9 below:

Table 9. Watershed Management Program Implementation Requirements

Part	Provision	Due Date
VI.C.24.b	IV. <u>Notify Regional Water Board of intent to develop Watershed Management Program or enhanced WMP and request submittal date for draft program plan</u>	6 months after Order effective date
V. VI.C.24.b.c	VI. <u>For Permittee(s) that elect not to implement the conditions of Part VI.C.4.c.i or c.ii, Submit submit draft plan to Regional Water Board Executive Officer</u>	1 year after Order effective date
VI.C.4.c	<u>For Permittee(s) that elect to implement the conditions of Part VI.C.4.c.i or c.ii, submit draft plan to Regional Water Board Executive Officer</u>	<u>18 months after Order effective date</u>
VI.C.4.c.iv	<u>For Permittees that elect to collaborate on an enhanced WMP that meets the requirements of Part VI.C.4.c.iv, submit draft plan to Regional Water Board Executive Officer</u>	<u>18 months after Order effective date, provide final work plan for development of enhanced WMP, including early actions to achieve all interim and final water quality based effluent limitations and receiving water limitations pursuant to Part</u>

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			<u>VI.E. and applicable Attachments with deadlines occurring prior to program approval</u> <u>30 months after Order effective date, submit draft plan</u>
VII. .c	<u>VI.C.24</u>	Submit final plan to Regional Water Board Executive Officer	3 months after receipt of Regional Water Board comments on draft plan
VIII.	<u>VI.C.64</u>	Begin implementation of Watershed Management Program	Upon submittal <u>approval of final plan by Regional Water Board Executive Officer</u>
IX.	<u>VI.C.68-a.ii</u>	X. <u>Comprehensive Evaluation evaluation of Watershed Management Program and submittal of revisions modifications to plan</u>	Annually, beginning in 2015 <u>Every two years from date of approval</u>

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b. Permittees that elect to develop a Watershed Management Program must notify the Regional Water Board no later than six months after the effective date of this Order.

i. Such notification shall specify if the Permittee(s) are requesting a 12-month or 18-month submittal date for the draft Watershed Management Program, per Part VI.C.4.c.i – ii, or if the Permittees are requesting a 18/30-month submittal date for the draft enhanced Watershed Management Program per Part VI.C.4.c.iv.

ii. As part of their notice of intent to develop a WMP, Permittees shall identify all applicable water quality based effluent limitations and receiving water limitations pursuant to Part VI.E. and the applicable attachment(s) with compliance deadlines occurring prior to approval of a WMP. Permittees shall identify watershed control measures that will be implemented by participating Permittees concurrently with the development of a Watershed Management Program to ensure that MS4 discharges achieve applicable water quality based effluent limitations and receiving water limitations set forth in Part VI.E. and the applicable attachment(s) with compliance deadlines occurring prior to approval of a WMP.

iii. As part of their notification, Permittees electing to develop an enhanced Watershed Management Program shall submit the following:

(1) Plan concept and geographical scope,

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- (2) Cost estimate for plan development,
- (3) Executed MOU/agreement among participating Permittees to fund plan development,
- (4) Interim milestones for plan development and deadlines for their achievement,
- (5) Identification of, and commitment to fully implement, one multi-benefit regional pilot project within each watershed covered by the plan within 30 months of the effective date of this Order.
- (6) Demonstration that the requirements in Parts VI.C.4.c.iv.(1) and (2) have been met.

b.—

c. Permittees that elect to develop a Watershed Management Program shall submit a draft plan to the Regional Water Board Executive Officer ~~no later than 1 year after the effective date of this Order~~as follows:

i. For Permittees that elect to collaborate on the development of a Watershed Management Program, Permittees shall submit the draft Watershed Management Program no later than 18 months after the effective date of this Order if the following conditions are met in greater than 50% of the land area in the watershed:

- (1) Commence development of a Low Impact Development (LID) ordinance meeting the requirements of this Order's Planning and Land Development Program within 60 days of the effective date of the Order and have the first reading before the Permittee's decision-making body within 6 months of the effective date of the Order.
- (2) Commence development of a policy that specifies the use of green street strategies for transportation corridors within 60 days of the effective date of the Order and have the first reading before the Permittee's decision-making body within 6 months of the effective date of the Order.
- (3) Demonstrate in the notification of the intent to develop a Watershed Management Program that Parts VI.C.4.c.i(1) and (2) have been met in greater than 50% of the watershed area.

ii. For Permittees that elect to develop an individual Watershed Management Program, Permittees shall submit the draft Watershed Management Program no later than 18 months after the effective date of this Order if the following conditions are met:

- (1) Commence development of a Low Impact Development (LID) ordinance meeting the requirements of this Order's Planning and Land Development Program within 60 days of the effective date of the Order and have the first reading before the Permittee's decision-making body within 6 months of the effective date of the Order.
- (2) Commence development of a policy that specifies the use of green street strategies for transportation corridors within 60 days of the effective date of the Order and have the first reading before the Permittee's decision-making body within 6 months of the effective date of the Order.
- (3) Demonstrate in the notification of the intent to develop a Watershed Management Program that Parts VI.C.4.c.ii.(1) and (2) have been met.
- iii. For Permittees that elect not to implement the conditions under Part VI.C.4.c.i. or Part VI.C.4.c.ii., Permittees shall submit the draft Watershed Management Program no later than 12 months after the effective date of this Order.
- iv. For Permittees that elect to collaborate on the development of an enhanced Watershed Management Program, Permittees shall submit the work plan for development of the enhanced Watershed Management Program no later than 18 months after the effective date of this Order, and shall submit the draft program no later than 30 months after the effective date of this Order if the following conditions are met in greater than 50% of the land area in the watershed:
- (1) Commence development of a Low Impact Development (LID) ordinance meeting the requirements of this Order's Planning and Land Development Program within 60 days of the effective date of the Order and have the first reading before the Permittee's decision-making body within 6 months of the effective date of the Order.
- (2) Commence development of a policy that specifies the use of green street strategies for transportation corridors within 60 days of the effective date of the Order and have the first reading before the Permittee's decision-making body within 6 months of the effective date of the Order.
- e.(3) Demonstrate in the notification of the intent to develop an enhanced Watershed Management Program that Parts VI.C.4.c.iv.(1) and (2) have been met in greater than 50% of the watershed area.

d. Until the Watershed Management Program is approved by the Regional Water Board Executive Officer, Permittees that elect to develop a Watershed Management Program or enhanced Watershed Management Program shall:

i. Continue to implement their existing storm water management programs, including actions within each of the six categories of minimum control measures consistent with 40 CFR section 122.26(d)(2)(iv), and

ii. Implement watershed control measures sufficient to achieve water quality-based effluent limitations and receiving water limitations pursuant to Part VI.E. and set forth in Attachments L through R in satisfaction of compliance deadlines occurring prior to program approval.

a. Permittees that do not elect to develop a Watershed Management Program shall be subject to the baseline requirements in Part VI.D and shall demonstrate compliance with receiving water limitations pursuant to Part V.A. and with applicable interim water quality-based effluent limitations in Part VI.E pursuant to subparts VI.E.2.d.i.(1)-(3).

e.

f. Permittees subject to the Middle Santa Ana River Watershed Bacteria Indicator TMDL shall submit a Comprehensive Bacteria Reduction Plan (CBRP) for dry weather to the Regional Water Board Executive Officer no later than six months after the effective date of this Order. The CBRP shall describe, in detail, the specific actions that have been taken or will be taken to achieve compliance with the dry weather water quality-based effluent limitations and the receiving water limitations for the Middle Santa Ana River Watershed Bacteria Indicator TMDL by December 31, 2015. The CBRP shall also establish a schedule for developing a CBRP to comply with the water quality-based effluent limitations and the receiving water limitations for the Middle Santa Ana River Bacteria Indicator TMDL during wet weather by December 31, 2025. The CBRP may be developed in lieu of the Watershed Management Program for the Middle Santa Ana River Watershed.

b.

2.4. Program Development

a. Identification of Water Quality Priorities

Permittees shall identify the water quality priorities within each WMA that will be addressed by the Watershed Management Program. At a minimum, these priorities shall include achieving applicable water quality-based effluent limitations and/or receiving water limitations established pursuant to TMDLs, as set forth in Part VI.E and Attachments L through R of this Order.

i. Water Quality Characterization. Each plan shall include an evaluation of existing water quality conditions, including characterization of storm water

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and non-storm water discharges from the MS4 and receiving water quality, to support identification and prioritization/sequencing of management actions.

- ii. ~~Water body~~Body-Pollutant Classification. On the basis of the evaluation of existing water quality conditions, water body-pollutant combinations shall be classified into one of the following three categories:
- (1) Category 1 (Highest Priority): Water body-pollutant combinations for which water quality-based effluent limitations and/or receiving water limitations are established in Part VI.E and Attachments L through R of this Order.
 - (2) Category 2 (High Priority): Pollutants for which data indicate water quality impairment in the receiving water according to the State's Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List (State Listing Policy) and for which MS4 discharges may be causing or contributing to the impairment.
 - (3) Category 3 (Medium Priority): Pollutants for which there are insufficient data to indicate water quality impairment in the receiving water according to the State's Listing Policy, but which exceed applicable water quality standards/receiving water limitations contained in this Order and for which MS4 discharges may be causing or contributing to the exceedance.
- iii. Source Assessment. Utilizing existing information, potential sources within the watershed for the water body-pollutant combinations in Categories 1 ~~and 2-3~~ shall be identified.
- (1) Permittees shall identify known and suspected storm water and non-storm water pollutant sources in discharges to the MS4 and from the MS4 to receiving waters and any other stressors related to MS4 discharges causing or contributing to the ~~highest~~ water quality priorities ~~(Categories 1 and 2)~~. The identification of known and suspected sources of the highest water quality priorities shall consider the following:
 - (a) Review of available data, including but not limited to:
 - (i) Findings from the Permittees' Illicit Connections and Illicit Discharge Elimination Programs;
 - (ii) Findings from the Permittees' Industrial/Commercial Facilities Programs;
 - (iii) Findings from the Permittees' Development Construction Programs;

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- (iv) Findings from the Permittees' Public Agency Activities Programs;
 - (v) TMDL source investigations;
 - (vi) Watershed model results;
 - (vii) Findings from the Permittees' monitoring programs, including but not limited to TMDL compliance monitoring and receiving water monitoring; and
 - (viii) Any other pertinent data, information, or studies related to pollutant sources and conditions that contribute to the highest water quality priorities.
- (b) Locations of the Permittees' MS4s, including, at a minimum, all MS4 major outfalls and major structural controls for storm water and non-storm water that discharge to receiving waters.
 - (c) Other known and suspected sources of pollutants in non-storm water or storm water discharges from the MS4 to receiving waters within the WMA.
- iv. Prioritization.** Based on the findings of the source assessment, the issues within each watershed shall be prioritized and sequenced. Watershed priorities shall include at a minimum:
- (1) TMDLs
 - (a) Controlling pollutants for which there are water quality-based effluent limitations and/or receiving water limitations with interim or final compliance deadlines within the permit term, or TMDL compliance deadlines that have already passed and limitations have not been achieved.
 - (b) Controlling pollutants for which there are water quality-based effluent limitations and/or receiving water limitations with interim or final compliance deadlines between September 6, 2012 and October 25, 2017.
 - (2) Other Receiving Water Considerations
 - (a) Controlling pollutants for which data indicate impairment or exceedances of receiving water limitations in the receiving water and the findings from the source assessment implicates discharges from the MS4 shall be considered the second highest priority.

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b. Selection of Watershed Control Measures

- i.** Permittees shall identify strategies, control measures, and BMPs to implement through their individual storm water management programs, and collectively on a watershed scale, with the goal of creating an efficient program to focus individual and collective resources on watershed priorities.
- ii.** The objectives of the Watershed Control Measures shall include:
 - (1) Prevent or eliminate non-storm water discharges to the MS4 that are a source of pollutants from the MS4 to receiving waters.
 - (2) Implement pollutant controls necessary to achieve all applicable interim and final water quality-based effluent limitations and/or receiving water limitations pursuant to corresponding compliance schedules.
 - (3) Ensure that discharges from the MS4 do not cause or contribute to exceedances of receiving water limitations.
- iii.** Watershed Control Measures may include:
 - (1) Structural and/or non-structural controls and operation and maintenance procedures that are designed to achieve applicable water quality-based effluent limitations, receiving water limitations in Part VI.E and/or Attachments L through R;
 - (2) Retrofitting areas of existing development known or suspected to contribute to the highest water quality priorities with regional or sub-regional controls or management measures; and
 - (3) Stream and/or habitat rehabilitation or restoration projects where stream and/or habitat rehabilitation or restoration are necessary for, or will contribute to demonstrable improvements in the physical, chemical, and biological receiving water conditions and restoration and/or protection of water quality standards in receiving waters.
- iv.** The following provisions of this Order shall be incorporated as part of the Watershed Management Program:
 - (1) Minimum Control Measures.
 - (a) Permittees shall assess the minimum control measures (MCMs) as defined in Part VI.D.4 to Part VI.D.9-10 of this Order to identify opportunities for focusing resources on the high priority issues in each watershed. For each of the following minimum control measures, Permittees shall identify potential modifications that will address watershed priorities:

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- (i) ~~—~~ Planning and Land Development Program
- (~~ii~~)(i) Development Construction Program
- (~~iii~~)(ii) Industrial/Commercial Facilities Program
- (~~iv~~)(iii) Illicit Connection and Illicit Discharges Detection and Elimination Program
- (~~v~~)(iv) Public Agency Activities Program
- (~~vi~~)(v) Public Information and Participation Program
- (b) At a minimum, the Watershed Management Program shall include management programs consistent with 40 CFR section 122.26(d)(2)(iv)(A)-(D).
- (c) If the Permittee(s) elects to eliminate a control measure identified in Parts VI.D.4, VI.D.5, VI.D.6 and VI.D.8 to ~~Part VI.D.9-10~~, the Permittee(s) shall provide a justification for its elimination. The Planning and Land Development Program is not eligible for elimination.
- (d) Such customized actions, once approved as part of the Watershed Management Program, shall replace in part or in whole the requirements in Parts VI.D.4, VI.D.5, VI.D.6 and VI.D.8 to ~~Part VI.D.9-10~~ for participating Permittees.
- (2) Non-Storm Water Discharge Measures. Where Permittees identify non-storm water discharges from the MS4 as a source of pollutants ~~in the source assessment~~ that cause or contribute to exceedance of receiving water limitations, the Watershed Control Measures shall include strategies, control measures, and/or BMPs that must be implemented to effectively eliminate the source of pollutants consistent with Parts III.A and VI.D.9-10. These may include measures to prohibit the non-storm water discharge to the MS4, additional BMPs to reduce pollutants in the non-storm water discharge or conveyed by the non-storm water discharge, diversion to a sanitary sewer for treatment, or strategies to require the non-storm water discharge to be separately regulated under a general NPDES permit.
- (3) TMDL Control Measures. Permittees shall compile control measures that have been identified in TMDLs and corresponding implementation plans. Permittees shall identify those control measures to be modified, if any, to most effectively address TMDL requirements within the watershed. If not sufficiently identified in previous documents, or if implementation plans have not yet been developed (e.g., USEPA established TMDLs), the Permittees shall evaluate and identify control

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measures to achieve water quality-based effluent limitations and/or receiving water limitations established in this Order pursuant to these TMDLs.

- (a) TMDL control measures shall include where necessary control measures to address both storm water and non-storm water discharges from the MS4.
 - (b) TMDL control measures may include baseline or customized activities covered under the general MCM categories in Part VI.D as well as BMPs and other control measures covered under the non-storm water discharge provisions of Part III.A of this Order.
 - (c) The ~~plan~~-WMP shall include, at a minimum, those actions that will be implemented during the permit term to achieve interim and/or final water quality-based effluent limitations and/or receiving water limitations with compliance deadlines within the permit term.
- (4) Each plan shall include the following components:
- (a) Identification of specific structural controls and non-structural best management practices, including operational source control and pollution prevention, and any other actions or programs to achieve all water quality-based effluent limitations and receiving water limitations contained in this Part VI.E and Attachments L through R to which the Permittee(s) is subject;
 - (b) For each structural control and non-structural best management practice, the number, type, and location(s) and/or frequency of implementation;
 - (c) For any pollution prevention measures, the nature, scope, and timing of implementation;
 - (d) For each structural control and non-structural best management practice, interim milestones and dates for achievement to ensure that TMDL compliance deadlines will be met; and
 - (e) The plan shall clearly identify the responsibilities of each participating Permittee for implementation of watershed control measures.
- (5) Permittees shall conduct a Reasonable Assurance Analysis for each TMDL-water body-pollutant combination addressed by the Watershed Management Program. A Reasonable Assurance Analysis (RAA) shall be quantitative and performed using a peer-reviewed model in the public domain. Models to be considered for the RAA, without exclusion, are the Watershed Management Modeling System (WMMS), Hydrologic Simulation Program-FORTRAN (HSPF), and the Structural BMP Prioritization and Analysis Tool (SBPAT). The RAA shall commence with assembly of all available, relevant subwatershed

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data collected within the last 10 years, including land use and pollutant loading data, establishment of quality assurance/quality control (QA/QC) criteria, QA/QC checks of the data, and identification of the data set meeting the criteria for use in the analysis. Data on performance of watershed control measures needed as model input shall be drawn only from peer-reviewed sources. These data shall be statistically analyzed to determine the best estimate of performance and the confidence limits on that estimate for the pollutants to be evaluated. The objective of the RAA shall be to demonstrate the ability of Watershed Management Programs and enhanced Watershed Management Programs to ensure that Permittees' MS4 discharges achieve applicable water quality based effluent limitations and do not cause or contribute to exceedances of receiving water limitations. as follows:

- (a) ~~Permittees shall conduct an assessment (through a quantitative analysis / modeling effort) to demonstrate~~ using the RAA that the activities and control measures identified in the Watershed Control Measures will achieve applicable water quality-based effluent limitations and/or receiving water limitations in Attachments L through R with compliance deadlines during the permit term.
- (b) Where the TMDL Provisions in Part VI.E and Attachments L through R do not include interim or final water quality-based effluent limitations and/or receiving water limitations with compliance deadlines during the permit term, Permittees shall identify interim milestones and dates for their achievement to ensure adequate progress toward achieving interim and final water quality-based effluent limitations and/or receiving water limitations with deadlines beyond the permit term.
- ~~(b)~~(c) For water body-pollutant combinations not addressed by TMDLs, Permittees shall demonstrate using the RAA that the activities and control measures identified in the Watershed Control Measures will achieve applicable receiving water limitations as soon as possible.
- (6) Permittees shall provide documentation that they have the necessary legal authority to implement the Watershed Control Measures identified in the plan, or that other legal authority exists to compel implementation of the Watershed Control Measures.

c. Compliance Schedules

Permittees shall incorporate compliance schedules in Attachments L through R into the plan and, where necessary develop interim milestones and dates for

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their achievement. Compliance schedules and interim milestones and dates for their achievement shall be used to measure progress towards addressing the highest water quality priorities and achieving applicable water quality-based effluent limitations and/or receiving water limitations.

- i. Schedules must be adequate for measuring progress on a watershed scale ~~twice during the permit term~~ once every two years.
- ii. Schedules must be developed for both the strategies, control measures and BMPs implemented by each Permittee within its jurisdiction and for those that will be implemented by multiple Permittees on a watershed scale.
- iii. Schedules shall incorporate the following:
 - (1) Compliance deadlines occurring within the permit term for all applicable interim and/or final water quality-based effluent limitations and/or receiving water limitations in Part VI.E and Attachments L through R of this Order,
 - (2) Interim milestones and dates for their achievement within the permit term for any applicable final water quality-based effluent limitation and/or receiving water limitation in Part VI.E and Attachments L through R, where deadlines within the permit term are not otherwise specified.
 - (3) For watershed priorities related to addressing exceedances of receiving water limitations in Part V.A and not otherwise addressed by Part VI.E:
 - (a) Milestones based on measureable criteria or indicators, to be achieved in the receiving waters and/or MS4 discharges,
 - ~~(b)~~(a) A schedule with dates for achieving the milestones ~~as soon as possible~~, and
 - ~~(c)~~(b) A final date for achieving the receiving water limitations ~~within the permit term~~ as soon as possible.
 - ~~(d)~~(c) The milestones and implementation schedule in (a)-(c) fulfill the requirements in Part V.A.3.a to prepare an Integrated Monitoring Compliance Report.

3.5. Watershed Management Program Implementation

Each Permittee shall begin implementing the Watershed Management Program immediately upon approval of the plan by the Regional Water Board Executive Officer.

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- a. Permittees may request an extension of deadlines for achievement of interim milestones established pursuant to Part VI.C.4.c.iii.(3). Permittees shall provide requests in writing at least 90 days prior to the deadline and shall include in the request the justification for the extension. Extensions shall be subject to approval by the Regional Water Board Executive Officer.

4.6. Integrated Watershed Monitoring and Assessment

Permittees in each WMA shall develop an integrated monitoring program ~~and assessment program~~ as set forth in Part IV of the MRP (Attachment E) or implement a customized monitoring program in conjunction with an approved Watershed Management Program as defined below. Each monitoring program shall ~~to~~ assess progress toward achieving the water quality-based effluent limitations and/or receiving water limitations per the compliance schedules, and progress toward addressing the ~~highest~~ water quality priorities for each WMA. The customized monitoring program shall be submitted as part of the Watershed Management Program, or where Permittees elect to develop an enhanced Watershed Management Program, shall be submitted within 18 months of the effective date of this Order. Monitoring programs shall be subject to approval by the Executive Officer. The customized monitoring program shall be designed to address the Primary Objectives detailed in Attachment E, Part II.A and shall include the following program elements:

- Receiving Water Monitoring
- Storm Water Outfall Monitoring
- Non-Storm Water Outfall Monitoring
- New Development/Re-Development Effectiveness Tracking
- Regional Studies

5.7. Adaptive Management Process

- a. Watershed Management Program Adaptive Management Process
- i. Permittees in each WMA shall implement an adaptive management process, ~~annually every two years from the date of program approval during the permit term, beginning in 2015,~~ adapting the Watershed Management Program or enhanced WMP to become more effective, based on, but not limited to a consideration of the following:
- (1) Progress toward achieving interim and/or final water quality-based effluent limitations and/or receiving water limitations in Part VI.E and Attachments L through R, according to established compliance schedules;

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- (2) Progress toward achieving improved water quality in MS4 discharges and achieving receiving waters limitations through implementation of the watershed control measures based on an evaluation of outfall-based monitoring data and receiving water monitoring data;
- (3) Achievement of interim milestones;
- (4) Re-evaluation of the ~~highest~~ water quality priorities identified for the WMA based on more recent water quality data for discharges from the MS4 and the receiving water(s) and a reassessment of sources of pollutants in MS4 discharges;
- (5) Availability of new information and data from sources other than the Permittees' monitoring program(s) within the WMA that informs the effectiveness of the actions implemented by the Permittees;
- (6) Regional Water Board recommendations; and
- (7) Recommendations for modifications to the Watershed Management Program solicited through a public participation process.

ii. Based on the results of the adaptive management process, Permittees shall report any modifications, including where appropriate new compliance deadlines and interim milestones, necessary to improve the effectiveness of the Watershed Management Program or enhanced Watershed Management Program in the Annual Report, as required pursuant to Part XVIII.A.6 of the MRP (Attachment E), and as part of the Report of Waste Discharge (ROWD) required pursuant to Part II.B of Attachment D – Standard Provisions.

- (1) The adaptive management process fulfills the requirements in Part V.A.4 to address continuing exceedances of receiving water limitations.

~~iii.~~ Permittees shall implement any modifications to the Watershed Management Program or enhanced Watershed Management Program upon approval by the Regional Water Board Executive Officer or within 60 days of submittal if the Regional Water Board Executive Officer expresses no objections.

~~d.~~ Jurisdictional Storm Water Management Program Adaptive Management Process

~~iv.~~ Permittees in the WMA shall implement the adaptive management process at least annually with regard to its jurisdictional storm water management program to improve its effectiveness, based on, but not limited to the following:

- ~~(1) Measurable or demonstrable reductions of illicit discharges to the MS4 based on an evaluation of outfall-based monitoring data;~~

- ~~(2) Measurable or demonstrable reductions of pollutants in storm water discharges from the Permittee's MS4 through implementation of the storm water management program based on an evaluation of outfall-based monitoring data;~~
- ~~(3) Efficiency in implementing the Watershed Management Program;~~
- ~~(4) Progress toward achieving interim and/or final water quality-based effluent limitations and/or receiving water limitations in Part VI.E and Attachments L through R, according to established compliance schedules;~~
- ~~(5) Progress toward achieving receiving waters limitations through implementation of the storm water management program based on an evaluation of outfall-based monitoring data and receiving water monitoring data; and~~
- ~~(6) Regional Water Board recommendations during program and/or site inspections.~~
- ~~v. Based on the results of the adaptive management process, the Permittee shall report any modifications, including where appropriate new compliance deadlines or interim milestones, necessary to improve the effectiveness its jurisdictional storm water management program in the Annual Report, as required pursuant to Part XVIII.A.6 of the MRP (Attachment E), and as part of the ROWD required pursuant to Part II.B (Attachment D – Standard Provisions).~~
- ~~(1) The adaptive management process fulfills the requirements in Part V.A.4 to address continuing exceedances of receiving water limitations.~~
- ~~iii. The Permittee shall implement any modifications to its jurisdictional storm water management program upon acceptance by the Regional Water Board Executive Officer or within 60 days of submittal if the Regional Water Board Executive Officer expresses no objections.~~

~~ii.~~

C.D. Storm Water Management Program Minimum Control Measures

1. General Requirements

- a.** Each Permittee shall implement the requirements in Parts VI.D.4 through VI.D.9 10 below, or may in lieu of the requirements in Parts VI.D.4 through VI.D.9-10 implement customized actions within each of these general categories of control measures as set forth in an approved Watershed Management Program per Part VI.C. Implementation shall be consistent with the requirements of 40 CFR § 122.26(d)(2)(iv).

b. Timelines for Implementation

- i. Unless otherwise noted in Part VI.D, each Permittee that does not elect to develop a Watershed Management Program or enhanced Watershed Management Program per Part VI.C shall ensure implementation of implement the requirements contained in Part VI.D within 30 days 6 months after the effective date of this Order. In the interim, a Permittee shall continue to implement its existing storm water management program, including actions within each of the six categories of minimum control measures consistent with 40 CFR section 122.26(d)(2)(iv).
- i.ii. Permittees that elect to develop a Watershed Management Program or enhanced Watershed Management Program shall continue to implement their existing storm water management programs, including actions within each of the six categories of minimum control measures consistent with 40 CFR section 122.26(d)(2)(iv) until the Watershed Management Program or enhanced Watershed Management Program is approved by the Regional Water Board Executive Officer.

2. Progressive Enforcement and Interagency Coordination

- a.** Each Permittee shall develop and implement a Progressive Enforcement Policy to ensure that (1) regulated Industrial/Commercial facilities, (2) construction sites, (3) development and redevelopment sites with post-construction controls, and (4) illicit discharges are each brought into compliance with all storm water and non-storm water requirements within a reasonable time period as specified below.
- i.** Follow-up Inspections
- In the event that a Permittee determines, based on an inspection or illicit discharge investigation conducted, that a facility or site operator has failed to adequately implement all necessary BMPs, that Permittee shall take progressive enforcement actions which, at a minimum, shall include a follow-up inspection within 4 weeks from the date of the initial inspection and/or investigation.
- ii.** Enforcement Action
- In the event that a Permittee determines that a facility or site operator has failed to adequately implement BMPs after a follow-up inspection, that Permittee shall take enforcement action as established through authority in its municipal code and ordinances, through the judicial system, or refer the case to the Regional Water Board, per the Interagency Coordination provisions below.
- iii.** Records Retention
- Each Permittee shall maintain records, per their existing record retention policies, and make them available on request to the Regional Water Board, including inspection reports, warning letters, notices of violations, and other

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enforcement records, demonstrating a good faith effort to bring facilities into compliance.

iv. Referral of Violations of Municipal Ordinances and California Water Code § 13260

A Permittee may refer a violation(s) of its municipal storm water ordinances and/or California Water Code section 13260 by Industrial and Commercial facilities and construction site operators to the Regional Water Board provided that the Permittee has made a good faith effort of applying its Progressive Enforcement Policy to achieve compliance with its own ordinances. At a minimum, a Permittee's good faith effort must be documented with:

- (1) Two follow-up inspections, and
- (2) Two warning letters or notices of violation.

v. Referral of Violations of the Industrial and Construction General Permits, including Requirements to File a Notice of Intent or No Exposure Certification

For those facilities or site operators in violation of municipal storm water ordinances and subject to the Industrial and/or Construction General Permits, Permittees may escalate referral of such violations to the Regional Water Board (promptly via telephone or electronically) after one inspection and one written notice of violation (copied to the Regional Water Board) to the facility or site operator regarding the violation. In making such referrals, Permittees shall include, at a minimum, the following documentation:

- (1) Name of the facility or site,
- (2) Operator of the facility or site,
- (3) Owner of the facility or site,
- (4) WDID Number (if applicable),
- (5) Records of communication with the facility/site operator regarding the violation, which shall include at least one inspection report,
- (6) The written notice of violation (copied to the Regional Water Board),
- (7) For industrial sites, the industrial activity being conducted at the facility that is subject to the Industrial General Permit, and
- (8) For construction sites, site acreage and Risk Factor rating.

b. Investigation of Complaints Transmitted by the Regional Water Board Staff

Each Permittee shall initiate, within one business day,²⁵ investigation of complaints from facilities within its jurisdiction. The initial investigation shall include, at a minimum, a limited inspection of the facility to confirm validity of the

²⁵ Permittees may comply with the Permit by taking initial steps (such as logging, prioritizing, and tasking) to "initiate" the investigation within that one business day. However, the Regional Water Board would expect that the initial investigation, including a site visit, to occur within four business days.

complaint and to determine if the facility is in compliance with municipal storm water ordinances and, if necessary, to oversee corrective action.

c. Assistance with Regional Water Board Enforcement Actions

As directed by the Regional Water Board Executive Officer, Permittees shall assist Regional Water Board enforcement actions by:

- i. Assisting in identification of current owners, operators, and lessees of properties and sites.
- ii. Providing staff, when available, for joint inspections with Regional Water Board inspectors.
- iii. Appearing to testify as witnesses in Regional Water Board enforcement hearings.
- iv. Providing copies of inspection reports and documentation demonstrating application of its Progressive Enforcement Policy.

3. Modifications/Revisions

- a. Each Permittee shall modify its storm water management programs, protocols, practices, and municipal codes to make them consistent with the requirements in this Order.

4. Requirements Applicable to the Los Angeles County Flood Control District

a. Public Information and Participation Program (PIPP)

i. General

(1) The LACFCD shall participate in a regional Public Information and Participation Program (PIPP) or alternatively, shall implement its own PIPP that includes the requirements listed in this part. The LACFCD shall collaborate, as necessary, with other Permittees to implement PIPP requirements. The objectives of the PIPP are as follows:

- (a) To measurably increase the knowledge of the target audience about the MS4, the adverse impacts of storm water pollution on receiving waters and potential solutions to mitigate the impacts.
- (b) To measurably change the waste disposal and storm water pollution generation behavior of target audiences by encouraging the implementation of appropriate alternatives by providing information to the public.
- (c) To involve and engage a diversity of socio-economic groups and ethnic communities in Los Angeles County to participate in mitigating the impacts of stormwater pollution.

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ii. PIPP Implementation

- (1) The LACFCD shall implement the PIPP requirements listed in this Part VI.D.5 using one or more of the following approaches:
 - (a) By participating in a collaborative PIPP covering the entire service area of the Los Angeles County Flood Control District,
 - (b) By participating in one or more Watershed Group sponsored PIPPs, and/or
 - (c) Individually within the service area of the Los Angeles County Flood Control District.
- (2) If the LACFCD participates in a collaborative District-wide or Watershed Group PIPP, the LACFCD shall provide the contact information for their appropriate staff responsible for storm water public education activities to the designated PIPP coordinator and contact information changes no later than 30 days after a change occurs.

iii. Public Participation

- (1) The LACFCD, in collaboration with the County of Los Angeles, shall continue to maintain the countywide hotline (888-CLEAN-LA) for public reporting of clogged catch basin inlets and illicit discharges/dumping, faded or missing catch basin labels, and general storm water management information.
 - (a) The LACFCD shall include the reporting information, updated when necessary, in public information, and the government pages of the telephone book, as they are developed or published.
 - (b) The LACFCD, in collaboration with the County of Los Angeles, shall continue to maintain the www.888cleanla.com website.

iv. Residential Outreach Program

- (1) Working in conjunction with a District-wide or Watershed Group sponsored PIPP or individually, the LACFCD shall implement the following activities:
 - (a) Conduct storm water pollution prevention public service announcements and advertising campaigns
 - (b) Facilitate the dissemination of public education materials including, at a minimum, information on the proper handling (i.e., disposal, storage and/or use) of:
 - () Vehicle waste fluids
 - (i) Household waste materials (i.e., trash and household hazardous waste)
 - (ii) Construction waste materials

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- (iii) Pesticides and fertilizers (including integrated pest management practices [IPM] to promote reduced use of pesticides),
- (iv) Green waste (including lawn clippings and leaves)
- (v) Animal wastes
- (c) Facilitate the dissemination of activity-specific storm water pollution prevention public education materials, at a minimum, for the following points of purchase:
 - (i) Automotive parts stores
 - (ii) Home improvement centers / lumber yards / hardware stores / paint stores
 - (iii) Landscaping / gardening centers
 - (iv) Pet shops / feed stores
- (d) Maintain a storm water website, which shall include educational material and opportunities for the public to participate in storm water pollution prevention and clean-up activities listed in Part VI.D.5.
- (e) When implementing activities in (a)-(d), the LACFCD shall use effective strategies to educate and involve ethnic communities in storm water pollution prevention through culturally effective methods.

b. Industrial/Commercial Facilities Program

If the LACFCD operates, or has authority over, any facility(ies) identified in Part VI.D.6.b, LACFCD shall comply with the requirements in Part VI.D.6 for those facilities.

c. Public Agency Activities Program

i. General

- (1) The LACFCD shall implement a Public Agency Activities Program to minimize storm water pollution impacts from LACFCD-owned or operated facilities and activities. Requirements for Public Agency Facilities and Activities consist of the following components:
 - (a) Public Construction Activities Management.
 - (b) Public Facility Inventory
 - (c) Public Facility and Activity Management
 - (d) Vehicle and Equipment Washing
 - (e) Landscape and Recreational Facilities Management

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- (f) Storm Drain Operation and Maintenance
- (g) Parking Facilities Management
- (h) Emergency Procedures
- (i) Employee and Contractor Training

ii. Public Construction Activities Management

- (1) The LACFCD shall implement and comply with the Planning and Land Development Program requirements in Part VI.D.7 of this Order at LACFCD-owned or operated public construction projects that are categorized under the project types identified in Part VI.D.7 of this Order.
- (2) The LACFCD shall implement and comply with the appropriate Development Construction Program requirements in Part VI.D.8 of this Order at LACFCD-owned or operated construction projects as applicable.
- (3) For LACFCD-owned or operated projects that disturb less than one acre of soil, the LACFCD shall require the implementation of an effective combination of erosion and sediment control BMPs from Table 13 (see Construction Development Program).
- (4) The LACFCD shall obtain separate coverage under the Construction General Permit for all LACFCD-owned or operated construction sites that require coverage.

iii. Public Facility Inventory

- (1) The LACFCD shall maintain an updated watershed-based inventory and map of all LACFCD-owned or operated facilities that are potential sources of storm water pollution. The incorporation of facility information into a GIS is recommended. Sources to be tracked include but are not limited to the following:
 - (a) Chemical storage facilities
 - (b) Equipment storage and maintenance facilities (including landscape maintenance-related operations)
 - (c) Fueling or fuel storage facilities
 - (d) Materials storage yards
 - (e) Pesticide storage facilities
 - (f) LACFCD buildings
 - (g) LACFCD vehicle storage and maintenance yards
 - (h) All other LACFCD-owned or operated facilities or activities that the LACFCD determines may contribute a substantial pollutant load to the MS4.

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- (2) The LACFCD shall include the following minimum fields of information for each LACFCD-owned or operated facility in its watershed-based inventory and map.
- (a) Name of facility
 - (b) Name of facility manager and contact information
 - (c) Address of facility (physical and mailing)
 - (d) A narrative description of activities performed and principal products used at each facility and status of exposure to storm water.
 - (e) Coverage under the Industrial General Permit or other individual or general NPDES permits or any applicable waiver issued by the Regional or State Water Board pertaining to storm water discharges.
- (3) The LACFCD shall update its inventory and map once during the Permit term. The update shall be accomplished through a collection of new information obtained through field activities.

iv. Public Agency Facility and Activity Management

- (1) The LACFCD shall obtain separate coverage under the Industrial General Permit for all LACFCD-owned or operated facilities where industrial activities are conducted that require coverage under the Industrial General Permit.
- (2) The LACFCD shall implement the following measures for flood management projects:
- (a) Develop procedures to assess the impacts of flood management projects on the water quality of receiving waterbodies; and
 - (b) Evaluate existing structural flood control facilities during the planning phases of major maintenance or rehabilitation projects to determine if retrofitting the facility to provide additional pollutant removal from storm water is feasible.

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- (3) The LACFCD shall implement and maintain the general and activity-specific BMPs listed in Table 18 (BMPs for Public Agency Facilities and Activities) or an equivalent set of BMPs when such activities occur at LACFCD-owned or operated facilities and field activities (e.g., project sites) including but not limited to the facility types listed in Part VI.D.9.c above, and at any area that includes the activities described in Table 18, or that have the potential to discharge pollutants in storm water.
- (4) Any contractors hired by the LACFCD to conduct Public Agency Activities shall be contractually required to implement and maintain the general and activity specific BMPs listed in Table 18 or an equivalent set of BMPs. The LACFCD shall conduct oversight of contractor activities to ensure these BMPs are implemented and maintained.
- (5) Effective source control BMPs for the activities listed in Table 18 shall be implemented at LACFCD-owned or operated facilities, unless the pollutant generating activity does not occur. The LACFCD shall require implementation of additional BMPs where storm water from the MS4 discharges to a significant ecological area (SEA, see Attachment A for definition), a water body subject to TMDL Provisions in Part VI.E, or a CWA section 303(d) listed water body (see Part VI.E below). Likewise, for those BMPs that are not adequately protective of water quality standards, the LACFCD shall implement additional site-specific controls.

v. Vehicle and Equipment Washing

- (1) The LACFCD shall implement and maintain the activity specific BMPs listed in Table 18 (BMPs for Public Agency Facilities and Activities) or an equivalent set of BMPs for all fixed vehicle and equipment washing areas;
- (2) The LACFCD shall prevent discharges of wash waters from vehicle and equipment washing to the MS4 by implementing any of the following measures at existing facilities with vehicle or equipment wash areas:
 - (a) Self-contain, and haul off for disposal; or
 - (b) Equip with a clarifier or an alternative pre-treatment device and plumb to the sanitary sewer in accordance with applicable waste water provider regulations

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- (3) The LACFCD shall ensure that any LACFCD facilities constructed, redeveloped, or replaced shall not discharge wastewater from vehicle and equipment wash areas to the MS4 by plumbing all areas to the sanitary sewer in accordance with applicable waste water provider regulations, or self-containing all waste water/ wash water and hauling to a point of legal disposal.

vi. Landscape and Recreational Facilities Management

- (1) The LACFCD shall implement and maintain the activity specific BMPs listed in Table 18 (BMPs for Public Agency Facilities and Activities) or an equivalent set of BMPs for all its public right-of-ways, flood control facilities and open channels and reservoirs, and landscape and recreational facilities and activities.
- (2) The LACFCD shall implement an IPM program that includes the following:
- (a) Pesticides are used only if monitoring indicates they are needed, and pesticides are applied according to applicable permits and established guidelines.
 - (b) Treatments are made with the goal of removing only the target organism.
 - (c) Pest controls are selected and applied in a manner that minimizes risks to human health, beneficial non-target organisms, and the environment.
 - (d) The use of pesticides, including Organophosphates and Pyrethroids, does not threaten water quality.
 - (e) Partner, as appropriate, with other agencies and organizations to encourage the use of IPM.
 - (f) Adopt and verifiably implement policies, procedures, and/ or ordinances requiring the minimization of pesticide use and encouraging the use of IPM techniques (including beneficial insects) for Public Agency Facilities and Activities.
 - (g) Policies, procedures, and ordinances shall include a schedule to reduce the use of pesticides that cause impairment of surface waters by implementing the following procedures:
 - (i) Prepare and annually update an inventory of pesticides used by all internal departments, divisions, and other operational units.
 - (ii) Quantify pesticide use by staff and hired contractors.
 - (iii) Demonstrate implementation of IPM alternatives where feasible to reduce pesticide use.

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(3) The LACFCD shall implement the following requirements:

- (a) Use a standardized protocol for the routine and non-routine application of pesticides (including pre-emergents), and fertilizers.
- (b) Ensure no application of pesticides or fertilizers are applied to an area immediately prior to, during or immediately after a rain event, or when water is flowing off the area.
- (c) Ensure that no banned or unregistered pesticides are stored or applied.
- (d) Ensure that all staff applying pesticides are certified in the appropriate category by the California Department of Pesticide Regulation, or are under the direct supervision of a pesticide applicator certified in the appropriate category.
- (e) Implement procedures to encourage the retention and planting of native vegetation to reduce water, pesticide and fertilizer needs; and
- (f) Store pesticides and fertilizers indoors or under cover on paved surfaces, or use secondary containment.
 - (i) Reduce the use, storage, and handling of hazardous materials to reduce the potential for spills.
 - (ii) Regularly inspect storage areas.

vii. Storm Drain Operation and Management

- (1) The LACFCD shall implement and maintain the activity specific BMPs listed in Table 18 or equivalent set of BMPs for storm drain operation and maintenance.
- (2) Ensure that all the material removed from the MS4 does not reenter the system. Solid material shall be dewatered in a contained area and liquid material shall be disposed in accordance with any of the following measures:
 - (a) Self-contain, and haul off for legal disposal; or
 - (b) Equip with a clarifier or an alternative pre-treatment device; and plumb to the sanitary sewer in accordance with applicable waste water provider regulations.
- (3) Catch Basin Cleaning
 - (a) In areas that are not subject to a trash TMDL, the LACFCD shall determine priority areas and shall update its map or list of catch basins with their GPS coordinates and priority:
 - Priority A: Catch basins that are designated as consistently generating the highest volumes of trash and/or debris.

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Priority B: Catch basins that are designated as consistently generating moderate volumes of trash and/or debris.

Priority C: Catch basins that are designated as generating low volumes of trash and/or debris.

The map or list shall contain the rationale or data to support priority designations.

(b) In areas not subject to a trash TMDL, the LACFCD shall inspect its catch basins according to the following schedule:

Priority A: A minimum of 3 times during the wet season (October 1 through April 15) and once during the dry season every year.

Priority B: A minimum of once during the wet season and once during the dry season every year.

Priority C: A minimum of once per year.

Catch basins shall be cleaned as necessary on the basis of inspections. At a minimum, LACFCD shall ensure that any catch basin that is determined to be at least 25% full of trash shall be cleaned out. LACFCD shall maintain inspection and cleaning records for Regional Water Board review.

(c) In areas that are subject to a trash TMDL, the subject Permittees shall implement the applicable provisions in Part VI.E.

(4) Catch Basin Labels and Open Channel Signage

(a) LACFCD shall label all catch basin inlets that they own with a legible "no dumping" message.

(b) The LACFCD shall inspect the legibility of the catch basin stencil or label nearest the inlet prior to the wet season every year.

(c) The LACFCD shall record all catch basins with illegible stencils and re-stencil or re-label within 180 days of inspection.

(d) The LACFCD shall post signs, referencing local code(s) that prohibit littering and illegal dumping, at designated public access points to open channels, creeks, urban lakes, and other relevant waterbodies.

(5) Open Channel Maintenance

The LACFCD shall implement a program for Open Channel Maintenance that includes the following:

(a) Visual monitoring of LACFCD owned open channels and other drainage structures for trash and debris at least annually;

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- (b) Removal of trash and debris from open channels a minimum of once per year before the wet season;
 - (c) Elimination of the discharge of contaminants produced by storm drain maintenance and clean outs; and
 - (d) Proper disposal of debris and trash removed during open channel maintenance.
- (6) Infiltration from Sanitary Sewer to MS4/Preventive Maintenance
- (a) The LACFCD shall implement controls and measures to prevent and eliminate infiltration of seepage from sanitary sewers to its MS4 thorough routine preventive maintenance of its MS4.
 - (b) The LACFCD shall implement controls to limit infiltration of seepage from sanitary sewers to its MS4 where necessary. Such controls must include:
 - (i) Adequate plan checking for construction and new development;
 - (ii) Incident response training for its employees that identify sanitary sewer spills;
 - (iii) Code enforcement inspections;
 - (iv) MS4 maintenance and inspections;
 - (v) Interagency coordination with sewer agencies; and
 - (vi) Proper education of its staff and contractors conducting field operations on its MS4.
- (7) LACFCD-Owned Treatment Control BMPs
- (a) The LACFCD shall implement an inspection and maintenance program for all LACFCD-owned treatment control BMPs, including post-construction treatment control BMPs.
 - (b) The LACFCD shall ensure proper operation of all its treatment control BMPs and maintain them as necessary for proper operation, including all post-construction treatment control BMPs.
 - (c) Any residual water produced by a treatment control BMP and not being internal to the BMP performance when being maintained shall be:
 - (i) Hauled away and legally disposed of; or
 - (ii) Applied to the land without runoff; or
 - (iii) Discharged to the sanitary sewer system (with permits or authorization); or
 - (iv) Treated or filtered to remove bacteria, sediments, nutrients, and meet the limitations set in Table 19 (Discharge Limitations

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for Dewatering Treatment BMPs), prior to discharge to the MS4.

viii. Parking Facilities Management

LACFCD-owned parking lots exposed to storm water shall be kept clear of debris and excessive oil buildup and cleaned no less than 2 times per month and/or inspected no less than 2 times per month to determine if cleaning is necessary. In no case shall a LACFCD-owned parking lot be cleaned less than once a month.

ix. Emergency Procedures

The LACFCD may conduct repairs and rehabilitation of essential public service systems and infrastructure in emergency situations with a self-waiver of the provisions of this Order as follows:

- (1) The LACFCD shall abide by all other regulatory requirements, including notification to other agencies as appropriate.
- (2) Where the self-waiver has been invoked, the LACFCD shall notify the Regional Water Board Executive Officer of the occurrence of the emergency no later than 30 business days after the situation of emergency has passed.
- (3) Minor repairs of essential public service systems and infrastructure in emergency situations (that can be completed in less than one week) are not subject to the notification provisions. Appropriate BMPs to reduce the threat to water quality shall be implemented.

x. Employee and Contractor Training

- (1) The LACFCD shall, no later than one year after Order adoption and annually thereafter before June 30, train all of their employees and contractors in targeted positions (whose interactions, jobs, and activities affect storm water quality) on the requirements of the overall storm water management program to:
 - (a) Promote a clear understanding of the potential for activities to pollute storm water.
 - (b) Identify opportunities to require, implement, and maintain appropriate BMPs in their line of work.
- (2) The LACFCD shall, no later than one year after Order adoption and annually thereafter before June 30, train all of their employees and contractors who use or have the potential to use pesticides or fertilizers (whether or not they normally apply these as part of their work). Training programs shall address:
 - (a) The potential for pesticide-related surface water toxicity.

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(b) Proper use, handling, and disposal of pesticides.

(c) Least toxic methods of pest prevention and control, including IPM.

(d) Reduction of pesticide use.

(3) The LACFCD shall require appropriate training of contractor employees in targeted positions as described above.

d. Illicit Connections and Illicit Discharge Elimination Program

i. General

(1) The LACFCD shall continue to implement an Illicit Connection and Illicit Discharge (IC/ID) Program to detect, investigate, and eliminate IC/IDs to its MS4. The IC/ID Program must be implemented in accordance with the requirements and performance measures specified in the following subsections.

(2) As stated in Part VI.A.2 of this Order, each Permittee must have adequate legal authority to prohibit IC/IDs to the MS4 and enable enforcement capabilities to eliminate the source of IC/IDs.

(3) The LACFCD's IC/ID Program shall consist of at least the following major program components:

(a) An up-to-date map of LACFCD's MS4

(b) Procedures for conducting source investigations for IC/IDs

(c) Procedures for eliminating the source of IC/IDs

(d) Procedures for public reporting of illicit discharges

(e) Spill response plan

(f) IC/IDs education and training for LACFCD staff

ii. MS4 Mapping

(1) The LACFCD shall maintain an up-to-date and accurate electronic map of its MS4. If possible, the map should be maintained within a GIS. The map must show the following, at a minimum:

(a) Within one year of Permit adoption, the location of outfalls owned and maintained by the LACFCD. Each outfall shall be given an alphanumeric identifier, which must be noted on the map. Each mapped outfall shall be located using a geographic positioning system (GPS). Photographs of the major outfalls shall be taken to provide baseline information to track operation and maintenance needs over time.

(b) The location and length of open channels and underground storm drain pipes with a diameter of 36 inches or greater that are owned and operated by the LACFCD.

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- (c) The location and name of all waterbodies receiving discharges from those MS4 major outfalls identified in (a).
 - (d) All LACFCD's dry weather diversions installed within the MS4 to direct flows from the MS4 to the sanitary sewer system, including the owner and operator of each diversion.
 - (e) By the end of the Permit term, map all known permitted and documented connections to its MS4 system.
- (2) The MS4 map shall be updated as necessary.

iii. Illicit Discharge Source Investigation and Elimination

- (1) The LACFCD shall develop written procedures for conducting investigations to prioritize and identify the source of all illicit discharges to its MS4, including procedures to eliminate the discharge once the source is located.
- (2) At a minimum, the LACFCD shall initiate²⁶ an investigation(s) to identify and locate the source within one business day of becoming aware of the illicit discharge.
- (3) When conducting investigations, the LACFCD shall comply with the following:
 - (a) Illicit discharges suspected of being sanitary sewage and/or significantly contaminated shall be investigated first.
 - (b) The LACFCD shall track all investigations to document, at a minimum, the date(s) the illicit discharge was observed; the results of the investigation; any follow-up of the investigation; and the date the investigation was closed.
 - (c) The LACFCD shall prioritize and investigate the source of all observed illicit discharges to its MS4.
 - (d) If the source of the illicit discharge is found to be a discharge authorized under an NPDES permit, the LACFCD shall document the source and report to the Regional Water Board within 30 days of determination. No further action is required.
 - (e) If the source of the illicit discharge has been determined to originate from within the jurisdiction of other Permittee(s) with land use authority over the suspected responsible party/parties, the LACFCD shall immediately alert the appropriate Permittee(s) of the problem for further action by the Permittee(s).

²⁶ Permittees may comply with the Permit by taking initial steps (such as logging, prioritizing, and tasking) to "initiate" the investigation within one business day. However, the Regional Water Board would expect that the initial investigation, including a site visit, occur within two business days of becoming aware of the illicit discharge.

- (4) When taking corrective action to eliminate illicit discharges, the LACFCD shall comply with the following:
- (a) If the source of the illicit discharge has been determined or suspected by the LACFCD to originate within an upstream jurisdiction(s), the LACFCD shall immediately notify the upstream jurisdiction(s), and notify the Regional Water Board within 30 days of such determination and provide all the information collected and efforts taken.
- (b) Once the Permittee with land use authority over the suspected responsible party/parties has been alerted, the LACFCD may continue to work in cooperation with the Permittee(s) to notify the responsible party/parties of the problem, and require the responsible party/parties to immediately initiate necessary corrective actions to eliminate the illicit discharge. Upon being notified that the discharge has been eliminated, the LACFCD may, in conjunction with the Permittee(s) conduct a follow-up investigation to verify that the discharge has been eliminated and cleaned up to the satisfaction of the LACFCD. The LACFCD shall document its follow-up investigation. The LACFCD may seek recovery and remediation costs from responsible parties or require compensation for the cost of all inspection and investigation activities. Resulting enforcement actions shall follow the program's Progressive Enforcement Policy.
- (c) If the source of the illicit discharge cannot be traced to a suspected responsible party, the LACFCD, in conjunction with other affected Permittees, shall continue implementing the illicit discharge/spill response plan.
- (5) In the event the LACFCD and/or other Permittees are unable to eliminate an ongoing illicit discharge following full execution of its legal authority and in accordance with its Progressive Enforcement Policy, including the inability to find the responsible party/parties, or other circumstances prevent the full elimination of an ongoing illicit discharge, the LACFCD and/or other Permittees shall notify the Regional Water Board within 30 days of such determination and provide available information to the Regional Water Board.

iv. Identification and Response to Illicit Connections

(1) Investigation

The LACFCD, upon discovery or upon receiving a report of a suspected illicit connection, shall initiate an investigation within 21 days, to determine the following: (1) source of the connection, (2) nature and volume of discharge through the connection, and (3) responsible party for the connection.

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(2) Elimination

The LACFCD, upon confirmation of an illicit connection to its MS4, shall ensure that the connection is:

- (a) Permitted or documented, provided the connection will only discharge storm water and non-storm water allowable under this Order or other individual or general NPDES Permits/WDRs, or
- (b) Eliminated within 180 days of completion of the investigation, using its formal enforcement authority, if necessary, to eliminate the illicit connection.

(3) Documentation

Formal records must be maintained for all illicit connection investigations and the formal enforcement taken to eliminate illicit connections.

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v. Public Reporting of Non-Stormwater Discharges and Spills

- (1) The LACFCD shall, in collaboration with the County, continue to maintain the 888-CLEAN-LA hotline and corresponding internet site at www.888cleanla.org to promote, publicize, and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into or from MS4s.
- (2) The LACFCD shall include information regarding public reporting of illicit discharges or improper disposal on the signage adjacent to open channels as required in Part VI.D.9.h.vi.(4).
- (3) The LACFCD shall develop and maintain written procedures that document how complaint calls and internet submissions are received, documented, and tracked to ensure that all complaints are adequately addressed. The procedures shall be evaluated annually to determine whether changes or updates are needed to ensure that the procedures accurately document the methods employed by the LACFCD. Any identified changes shall be made to the procedures subsequent to the annual evaluation.
- (4) The LACFCD shall maintain documentation of the complaint calls and internet submissions and record the location of the reported spill or IC/ID and the actions undertaken, including referrals to other agencies, in response to all IC/ID complaints.

vi. Illicit Discharge and Spill Response Plan

- (1) The LACFCD shall implement an ID and spill response plan for all spills that may discharge into its system. The ID and spill response plan shall clearly identify agencies responsible for ID and spill response and cleanup, contact information, and shall contain at a minimum the following requirements:
 - (a) Coordination with spill response teams throughout all appropriate departments, programs and agencies so that maximum water quality protection is provided.
 - (b) Initiation of investigation of all public and employee ID and spill complaints within one business day of receiving the complaint to assess validity.
 - (c) Response to ID and spills within 4 hours of becoming aware of the ID or spill, except where such IDs or spills occur on private property, in which case the response should be within 2 hours of gaining legal access to the property.
 - (d) IDs or spills that may endanger health or the environment shall be reported to appropriate public health agencies and the Office of Emergency Services (OES).

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vii. Illicit Connection and Illicit Discharge Education and Training

- (1) The LACFCD must continue to implement a training program regarding the identification of IC/IDs for all LACFCD field staff, who, as part of their normal job responsibilities (e.g., storm drain inspection and maintenance), may come into contact with or otherwise observe an illicit discharge or illicit connection to its MS4. Contact information, including the procedure for reporting an illicit discharge, must be included in the LACFCD’s fleet vehicles that are used by field staff. Training program documents must be available for review by the Regional Water Board.
- (2) The LACFCD’s training program should address, at a minimum, the following:
 - (a) IC/ID identification, including definitions and examples,
 - (b) investigation,
 - (c) elimination,
 - (d) cleanup,
 - (e) reporting, and
 - (f) documentation.
- (3) The LACFCD must create a list of applicable positions which require IC/ID training and ensure that training is provided at least twice during the term of this Order. The LACFCD must maintain documentation of the training activities.
- (4) New LACFCD staff members must be provided with IC/ID training within 180 days of starting employment.
- (5) The LACFCD shall require its contractors to train their employees in targeted positions as described above.

4.5. Public Information and Participation Program

a. General

- i. Each Permittee shall implement a Public Information and Participation Program (PIPP) that includes, ~~but is not limited to,~~ the requirements listed in this Part VI.D.45. Each Permittee shall be responsible for developing and implementing the PIPP and implementing specific PIPP requirements. The objectives of the PIPP are as follows:
 - (1) To measurably increase the knowledge of the target audiences about the MS4, the adverse impacts of storm water pollution on receiving waters and potential solutions to mitigate the impacts.
 - (2) To measurably change the waste disposal and storm water pollution generation behavior of target audiences by developing and encouraging the implementation of appropriate alternatives.

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- (3) To involve and engage a diversity of socio-economic groups and ethnic communities in Los Angeles County to participate in mitigating the impacts of storm water pollution.

b. PIPP Implementation

- i. Each Permittee shall implement the PIPP requirements listed in this Part VI.D.4 using one or more of the following approaches:
 - (1) By participating in a County-wide PIPP,
 - (2) By participating in one or more Watershed Group sponsored PIPPs, and/or
 - (3) Or individually within its jurisdiction.
- ii. If a Permittee participates in a County-wide or Watershed Group PIPP, the Permittee shall provide the contact information for their appropriate staff responsible for storm water public education activities to the designated PIPP coordinator and contact information changes no later than 30 days after a change occurs.

c. Public Participation

- i. Each Permittee, whether participating in a County-wide or Watershed Group sponsored PIPP, or acting individually, shall provide a means for public reporting of clogged catch basin inlets and illicit discharges/dumping, faded or missing catch basin labels, and general storm water and non-storm water pollution prevention information.
 - (1) Permittees may elect to use the 888-CLEAN-LA hotline as the general public reporting contact or each Permittee or Watershed Group may establish its own hotline, if preferred.
 - (2) Each Permittee shall include the reporting information, updated when necessary, in public information, and the government pages of the telephone book, as they are developed or published.
 - (3) Each Permittee shall identify staff or departments who will serve as the contact person(s) and shall make this information available on its website.
 - (4) Each Permittee is responsible for providing current, updated hotline contact information to the general public within its jurisdiction.
- ii. Organize events targeted to residents and population subgroups to educate and involve the community in storm water and non-storm water pollution prevention and clean-up (e.g., education seminars, clean-ups, and community catch basin stenciling).

d. Residential Outreach Program

- i. Working in conjunction with a County-wide or Watershed Group sponsored PIPP or individually, each Permittee shall implement the following activities:

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- (1) Conduct storm water pollution prevention public service announcements and advertising campaigns
- (2) Public education materials shall include but are not limited to information on the proper handling (i.e., disposal, storage and/or use) of:
 - (a) Vehicle waste fluids
 - (b) Household waste materials (i.e., trash and household hazardous waste, including personal care products and pharmaceuticals)
 - (c) Construction waste materials
 - (d) Pesticides and fertilizers (including integrated pest management practices [IPM] to promote reduced use of pesticides)
 - (e) Green waste (including lawn clippings and leaves)
 - (f) Animal wastes
- (3) Distribute activity specific storm water pollution prevention public education materials at, but not limited to, the following points of purchase:
 - (a) Automotive parts stores
 - (b) Home improvement centers / lumber yards / hardware stores/paint stores
 - (c) Landscaping / gardening centers
 - ~~(d) Pharmacies~~
 - ~~(e)~~(d) Pet shops / feed stores
- (4) Maintain storm water websites or provide links to storm water websites via the Permittee's website, which shall include educational material and opportunities for the public to participate in storm water pollution prevention and clean-up activities listed in Part VI.D.4.
- (5) Provide independent, parochial, and public schools within in each Permittee's jurisdiction with materials to educate school children (K-12) on storm water pollution. Material may include videos, live presentations, and other information. Permittees are encouraged to work with, or leverage, materials produced by other statewide agencies and associations such as the State Water Board's "Erase the Waste" educational program and the California Environmental Education Interagency Network (CEEIN) to implement this requirement.
- (6) When implementing activities in subsections (1)-(5), Permittees shall use effective strategies to educate and involve ethnic communities in storm water pollution prevention through culturally effective methods.

5-6. Industrial/Commercial Facilities Program

a. General

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- i. Each Permittee shall implement an Industrial / Commercial Facilities Program that meets the requirements of this Part VI.D.56. The Industrial / Commercial Facilities Program shall be designed to prevent illicit discharges into the MS4 and receiving waters, reduce industrial / commercial discharges of storm water to the maximum extent practicable, and prevent industrial / commercial discharges from the MS4 from causing or contributing to a violation of receiving water limitations. At a minimum, the Industrial / Commercial Facilities Program shall be implemented in accordance with the requirements listed in this Part VI.D.56, or as approved in a Watershed Management Program per Part VI.C. Minimum program components shall include the following components:

- (1) Track
- (2) Educate
- (3) Inspect
- (4) Ensure compliance with municipal ordinances at industrial and commercial facilities that are critical sources of pollutants in storm water

b. Track Critical Industrial / Commercial Sources

- i. Each Permittee shall maintain an updated watershed-based inventory or database containing the latitude / longitude coordinates of all industrial and commercial facilities within its jurisdiction that are critical sources of storm water pollution. The inventory or database shall be maintained in electronic format and incorporation of facility information into a Geographical Information System (GIS) is recommended. Critical Sources to be tracked are summarized below:

- (1) Commercial Facilities
 - (a) Restaurants
 - (b) Automotive service facilities (including those located at automotive dealerships)
 - (c) Retail Gasoline Outlets
 - (d) Nurseries and Nursery Centers (Merchant Wholesalers, Nondurable Goods, and Retail Trade)
- (2) USEPA "Phase I" Facilities [as specified in 40 CFR §122.26(b)(14)(i)-(xi)]
- (3) Other federally-mandated facilities [as specified in 40 CFR §122.26(d)(2)(iv)(C)]
 - (a) Municipal landfills
 - (b) Hazardous waste treatment, disposal, and recovery facilities
 - (c) Industrial facilities subject to section 313 "Toxic Release Inventory" reporting requirements of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) [42 U.S.C. § 11023]

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(4) All other commercial or industrial facilities that the Permittee determines may contribute a substantial pollutant load to the MS4.

ii. Each Permittee shall include the following minimum fields of information for each critical source industrial and commercial facility identified in its watershed-based inventory or database:

- (1) Name of facility
- (2) Name of owner/ operator and contact information
- (3) Address of facility (physical and mailing)
- (4) North American Industry Classification System (NAICS) code
- (5) Standard Industrial Classification (SIC) code
- (6) A narrative description of the activities performed and/or principal products produced
- (7) Status of exposure of materials to storm water
- (8) Name of receiving water
- (9) Identification of whether the facility is tributary to a CWA § 303(d) listed water body segment or water body segment subject to a TMDL, where the facility generates pollutants for which the water body segment is impaired.
- (10) Ability to denote if the facility is known to maintain coverage under the State Water Board's General NPDES Permit for the Discharge of Stormwater Associated with Industrial Activities (Industrial General Permit) or other individual or general NPDES permits or any applicable waiver issued by the Regional or State Water Board pertaining to storm water discharges.
- (11) Ability to denote if the facility has filed a No Exposure Certification with the State Water Board.

iii. Each Permittee shall update its inventory of critical sources at least annually. The update shall be accomplished through collection of new information obtained through field activities or through other readily available inter- and intra-agency informational databases (e.g., business licenses, pretreatment permits, sanitary sewer connection permits, and similar information).

c. Educate Industrial / Commercial Sources

i. At least once during the five-year period of this Order, each Permittee shall notify the owner/operator of each of its inventoried commercial and industrial sites identified in Part VI.D.56.b of the BMP requirements applicable to the site/source.

ii. Business Assistance Program

- (1) Each Permittee shall implement a Business Assistance Program to provide technical information to businesses to facilitate their efforts to

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reduce the discharge of pollutants in storm water. Assistance shall be targeted to select business sectors or small businesses upon a determination that their activities may be contributing substantial pollutant loads to the MS4 or receiving water. Assistance may include technical guidance and provision of educational materials. The Program may include:

- (a) On-site technical assistance, telephone, or e-mail consultation regarding the responsibilities of business to reduce the discharge of pollutants, procedural requirements, and available guidance documents.
- (b) Distribution of storm water pollution prevention educational materials to operators of auto repair shops; car wash facilities; restaurants and mobile sources including automobile/equipment repair, washing, or detailing; power washing services; mobile carpet, drape, or upholstery cleaning services; swimming pool, water softener, and spa services; portable sanitary services; and commercial applicators and distributors of pesticides, herbicides and fertilizers, if present.

d. Inspect Critical Commercial Sources

i. Frequency of Mandatory Commercial Facility Inspections

Each Permittee shall inspect all commercial facilities identified in Part VI.D.56.b twice during the 5-year term of the Order, provided that the first mandatory compliance inspection occurs no later than 2 years after the effective date of this Order. A minimum interval of 6 months between the first and the second mandatory compliance inspection is required. In addition, each Permittee shall implement the activities outlined in the following subparts.

ii. Scope of Mandatory Commercial Facility Inspections

Each Permittee shall inspect all commercial facilities to confirm that storm water and non-storm water BMPs are being effectively implemented in compliance with municipal ordinances. At each facility, inspectors shall verify that the operator is implementing effective source control BMPs for each corresponding activity. Each Permittee shall require implementation of additional BMPs where storm water from the MS4 discharges to a significant ecological area (SEA), a water body subject to TMDL provisions in Part VI.E, or a CWA § 303(d) listed impaired water body. Likewise, for those BMPs that are not adequately protective of water quality standards, a Permittee may require additional site-specific controls.

e. Inspect Critical Industrial Sources

Each Permittee shall conduct industrial facility compliance inspections as specified below.

i. Frequency of Mandatory Industrial Facility Compliance Inspections

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(1) Minimum Inspection Frequency

Each Permittee shall perform an initial mandatory compliance inspection at all industrial facilities identified in Part VI.D.56.b no later than 2 years after the effective date of this Order. After the initial inspection, all facilities that have not filed a No Exposure Certification with the State Water Board are subject to a second mandatory compliance inspection. A minimum interval of 6 months between the first and the second mandatory compliance inspection is required. A facility need not be inspected more than twice during the term of the Order unless subject to an enforcement action as specified in Part VI.D.56.h below.

(2) Exclusion of Facilities Previously Inspected by the Regional Water Board

Each Permittee shall review the State Water Board's Storm Water Multiple Application and Report Tracking System (SMARTS) database²⁷ at defined intervals to determine if an industrial facility has recently been inspected by the Regional Water Board. The first interval shall occur approximately 2 years after the effective date of the Order. The Permittee does not need to inspect the facility if it is determined that the Regional Water Board conducted an inspection of the facility within the prior 24 month period. The second interval shall occur approximately 4 years after the effective date of the Order. Likewise, the Permittee does not need to inspect the facility if it is determined that the Regional Water Board conducted an inspection of the facility within the prior 24 month period.

(3) No Exposure Verification

As a component of the first mandatory inspection, each Permittee shall identify those facilities that have filed a No Exposure Certification with the State Water Board. Approximately 3 to 4 years after the effective date of the Order, each Permittee shall evaluate its inventory of industrial facilities and perform a second mandatory compliance inspection at a minimum of 25% of the facilities identified to have filed a No Exposure Certification. The purpose of this inspection is to verify the continuity of the no exposure status.

(4) Exclusion Based on Watershed Management Program

A Permittee is exempt from the mandatory inspection frequencies listed above if it is implementing industrial inspections in accordance with an approved Watershed Management Program per Part VI.C.

ii. Scope of Mandatory Industrial Facility Inspections

Each Permittee shall confirm that each industrial facility:

- (1) Has a current Waste Discharge Identification (WDID) number for coverage under the Industrial General Permit, and that a Storm Water Pollution Prevention Plan (SWPPP) is available on-site; *or*

²⁷ SMARTS is accessible at <https://smarts.waterboards.ca.gov/smarts/faces/SwSmartsLogin.jsp>

- (2) Has applied for, and has received a current No Exposure Certification for facilities subject to this requirement;
- (3) Is effectively implementing BMPs in compliance with municipal ordinances. Facilities must implement the source control BMPs identified in Table 10, unless the pollutant generating activity does not occur. The Permittees shall require implementation of additional BMPs where storm water from the MS4 discharges to an environmentally sensitive area, a water body subject to TMDL Provisions in Part VI.E, or a CWA § 303(d) listed impaired water body. Likewise, if the specified BMPs are not adequately protective of water quality standards, a Permittee may require additional site-specific controls.
- (4) Applicable industrial facilities identified as not having either a current WDID or No Exposure Certification shall be notified that they must obtain coverage under the Industrial General Permit and shall be referred to the Regional Water Board per the Progressive Enforcement Policy procedures identified in Part VI.D.2.

f. Source Control BMPs for Commercial and Industrial Facilities

Effective source control BMPs for the activities listed in Table 10 shall be implemented at commercial and industrial facilities, unless the pollutant generating activity does not occur:

Table 10. Source Control BMPs at Commercial and Industrial Facilities

Pollutant-Generating Activity	BMP Narrative Description
Unauthorized Non-Storm water Discharges	Effective elimination of non-storm water discharges
Accidental Spills/ Leaks	Implementation of effective spills/ leaks prevention and response procedures
Vehicle/ Equipment Fueling	Implementation of effective fueling source control devices and practices
Vehicle/ Equipment Cleaning	Implementation of effective equipment/ vehicle cleaning practices and appropriate wash water management practices
Vehicle/ Equipment Repair	Implementation of effective vehicle/ equipment repair practices and source control devices
Outdoor Liquid Storage	Implementation of effective outdoor liquid storage source controls and practices
Outdoor Equipment Operations	Implementation of effective outdoor equipment source control devices and practices
Outdoor Storage of Raw Materials	Implementation of effective source control practices and structural devices
Storage and Handling of Solid Waste	Implementation of effective solid waste storage/ handling practices and appropriate control measures

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Pollutant-Generating Activity	BMP Narrative Description
Building and Grounds Maintenance	Implementation of effective facility maintenance practices
Parking/ Storage Area Maintenance	Implementation of effective parking/ storage area designs and housekeeping/ maintenance practices
Storm water Conveyance System Maintenance Practices	Implementation of proper conveyance system operation and maintenance protocols
Pollutant-Generating Activity	BMP Narrative Description from Regional Water Board Resolution No. 98-08
Sidewalk Washing	<ol style="list-style-type: none"> 1. Remove trash, debris, and free standing oil/grease spills/leaks (use absorbent material, if necessary) from the area before washing; and 2. Use high pressure, low volume spray washing using only potable water with no cleaning agents at an average usage of 0.006 gallons per square feet of sidewalk area.
Street Washing	Collect and divert wash water to the sanitary sewer – publically owned treatment works (POTW). Note: POTW approval may be needed.

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g. Significant Ecological Areas (SEAs)

For critical sources that discharge to MS4s that discharge to SEAs, each Permittee shall require operators to implement additional pollutant-specific controls to reduce pollutants in storm water runoff that are causing or contributing to exceedances of water quality standards.

h. Progressive Enforcement

Each Permittee shall implement its Progressive Enforcement Policy to ensure that Industrial / Commercial facilities are brought into compliance with all storm water requirements within a reasonable time period. See Part VI.D.2 for requirements for the development and implementation of a Progressive Enforcement Policy.

6-7. Planning and Land Development Program

a. Purpose

- i. Each Permittee shall implement a Planning and Land Development Program pursuant to Part VI.D.67.b for all New Development and Redevelopment projects subject to this Order to:

- (1) Lessen the water quality impacts of development by using smart growth practices such as compact development, directing development towards existing communities via infill or redevelopment, and safeguarding of environmentally sensitive areas.
- (2) Minimize the adverse impacts from storm water runoff on the biological integrity of Natural Drainage Systems and the beneficial uses of water bodies in accordance with requirements under CEQA (Cal. Pub. Resources Code § 21000 et seq.).
- (3) Minimize the percentage of impervious surfaces on land developments by minimizing soil compaction during construction, designing projects to minimize the impervious area footprint, and employing Low Impact Development (LID) design principles to mimic predevelopment ~~water balance~~hydrology through infiltration, evapotranspiration and rainfall harvest and use.
- (4) Maintain existing riparian buffers and enhance riparian buffers when possible.
- (5) Minimize pollutant loadings from impervious surfaces such as roof tops, parking lots, and roadways through the use of properly designed, technically appropriate BMPs (including Source Control BMPs such as good housekeeping practices), LID Strategies, and Treatment Control BMPs.
- (6) Properly select, design and maintain LID and Hydromodification Control BMPs to address pollutants that are likely to be generated, reduce changes to pre-development hydrology, assure long-term function, and avoid the breeding of vectors²⁸.
- (7) Prioritize the selection of BMPs to remove storm water pollutants, reduce storm water runoff volume, and beneficially use storm water to support an integrated approach to protecting water quality and managing water resources in the following order of preference:
 - (a) On-site infiltration, bioretention and/or rainfall harvest and use.
 - (b) On-site biofiltration, off-site ground water replenishment, and/or off-site retrofit.

b. Applicability

i. New Development Projects

- (1) Development projects subject to Permittee conditioning and approval for the design and implementation of post-construction controls to mitigate storm water pollution, prior to completion of the project(s), are:

²⁸ Treatment BMPs when designed to drain within 96 hours of the end of rainfall minimize the potential for the breeding of vectors. See DPH Best Management Practices for Mosquito Control in California Manual at <http://sgvmosquito.org/downloads/NPDES/BMP%20for%20Mosquito%20Control%2008-10.pdf>

- (a) All development projects equal to 1 acre or greater of disturbed area and adding more than 10,000 square feet of impervious surface area
- (b) Industrial parks 10,000 square feet or more of surface area
- (c) Commercial strip-malls 10,000 square feet or more surface area
- (d) Retail gasoline outlets 5,000 square feet or more of surface area
- (e) Restaurants (SIC 5812) 5,000 square feet or more of surface area
- (f) Parking lots 5,000 square feet or more of impervious surface area, or with 25 or more parking spaces
- (g) Street and road construction of 10,000 square feet or more of impervious surface area shall follow USEPA guidance regarding Managing Wet Weather with Green Infrastructure: Green Streets²⁹ (December 2008 EPA-833-F-08-009) to the maximum extent practicable. Street and road construction applies to standalone streets, roads, highways, and freeway projects, and also applies to streets within larger projects.
- (h) Automotive service facilities (SIC 5013, 5014, 5511, 5541, 7532-7534 and 7536-7539) 5,000 square feet or more of surface area
- (i) Redevelopment projects in subject categories that meet Redevelopment thresholds identified in Part VI.D.6.b.ii (Redevelopment Projects) below
- (j) Projects located in or directly adjacent to, or discharging directly to a Significant Ecological Area (SEA), where the development will:
 - (i) Discharge storm water runoff that is likely to impact a sensitive biological species or habitat; and
 - (ii) Create 2,500 square feet or more of impervious surface area
- (k) Single-family hillside homes. To the extent that a Permittee may lawfully impose conditions, mitigation measures or other requirements on the development or construction of a single-family home in a hillside area as defined in the applicable Permittee's Code and Ordinances, each Permittee shall require that during the construction of a single-family hillside home, the following measures are implemented:
 - (i) Conserve natural areas
 - (ii) Protect slopes and channels
 - (iii) Provide storm drain system stenciling and signage
 - (iv) Divert roof runoff to vegetated areas before discharge unless the diversion would result in slope instability
 - (v) Direct surface flow to vegetated areas before discharge unless the diversion would result in slope instability.

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²⁹ <http://water.epa.gov/infrastructure/greeninfrastructure/index.cfm>

ii. Redevelopment Projects

(1) Redevelopment projects subject to Permittee conditioning and approval for the design and implementation of post-construction controls to mitigate storm water pollution, prior to completion of the project(s), are:

(a) Land-disturbing activity that results in the creation or addition or replacement of 5,000 square feet or more of impervious surface area on an already developed site on development categories identified in Part VI.D.6.c. (New Development/Redevelopment Performance Criteria).

(b) Where Redevelopment results in an alteration to more than fifty percent of impervious surfaces of a previously existing development, and the existing development was not subject to post-construction storm water quality control requirements, the entire project must be mitigated.

(c) Where Redevelopment results in an alteration of less than fifty percent of impervious surfaces of a previously existing development, and the existing development was not subject to post-construction storm water quality control requirements, only the alteration must be mitigated, and not the entire development.

(i) Redevelopment does not include routine maintenance activities that are conducted to maintain original line and grade, hydraulic capacity, original purpose of facility or emergency redevelopment activity required to protect public health and safety. Impervious surface replacement, such as the reconstruction of parking lots and roadways which does not disturb additional area and maintains the original grade and alignment, is considered a routine maintenance activity. Redevelopment does not include the repaving of existing roads to maintain original line and grade.

(ii) Existing single-family dwelling and accessory structures are exempt from the Redevelopment requirements unless such projects create, add, or replace 10,000 square feet of impervious surface area.

(d) In this section, Existing Development or Redevelopment projects shall mean ~~projects~~ all discretionary permit projects or project phases that have not been deemed complete for processing, or discretionary permit projects without vesting tentative maps that have not requested and received an extension of previously granted approvals within 90 days of adoption of the Order. Projects that have been deemed complete within 90 days of adoption of the Order are not subject to the requirements Section 7.b. For Permittee's projects the effective date shall be the date the governing body or their designee approves initiation of the project design. ~~that have been constructed or for which grading or land disturbance permits have been submitted~~

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~~and are deemed complete prior to the adoption date of this Order, except as otherwise specified in this Order.~~

- (e) Specifically, the Newhall Ranch Project Phases I and II (a.k.a. the Landmark and Mission Village projects) are deemed to be an existing development that will at a minimum, be designed to comply with the Specific LID Performance Standards attached to the Waste Discharge Requirements (Order No. R4-2012-XXXX). All subsequent phases of the Newhall Ranch Project constructed during the term of this Order shall be subject to the requirements of this Order.

c. New Development/ Redevelopment Project Performance Criteria

(1) Integrated Water Quality/Flow Reduction/Resources Management Criteria

- (1) Each Permittee shall require all New Development and Redevelopment projects (referred to hereinafter as “new projects”) identified in Part VI.D.67.b to control pollutants, pollutant loads, and runoff volume emanating from the project site by: (1) minimizing the impervious surface area and (2) controlling runoff from impervious surfaces through infiltration, bioretention and/or rainfall harvest and use.
- (2) Except as provided in Part VI.D.67.c.ii. (Technical Infeasibility or Opportunity for Regional Ground Water Replenishment), Part VI.D.67.d.i (Local Ordinance Equivalence), or Part VI.D.67.c.v (Hydromodification), below, each Permittee shall require the project to retain on-site the Stormwater Quality Design Volume (SWQDv) defined as the runoff from:
- (a) The 0.75-inch, 24-hour rain event or
- (b) The 85th percentile, 24-hour rain event, as determined from the Los Angeles County 85th percentile precipitation isohyetal map, *whichever is greater*.
- (3) Bioretention and biofiltration systems shall meet the design specifications provided in Attachment H to this Order unless otherwise approved by the Regional Water Board Executive Officer.
- (4) When evaluating the potential for on-site retention, each Permittee shall consider the maximum potential for evapotranspiration from green roofs and rainfall harvest and use.
- (2) Alternative Compliance for Technical Infeasibility or Opportunity for Regional Ground Water Replenishment
- (1) In instances of technical infeasibility or where a project has been determined to provide an opportunity to replenish regional ground water supplies at an offsite location, each Permittee may allow projects to comply with this Order through the alternative compliance measures as described in Part VI.D.67.c.iii.

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(2) To demonstrate technical infeasibility, the project applicant must demonstrate that the project cannot reliably retain 100 percent of the SWQDv on-site, even with the maximum application of green roofs and rainwater harvest and use, and that compliance with the applicable post-construction requirements would be technically infeasible by submitting a site-specific hydrologic and/or design analysis conducted and endorsed by a registered professional engineer, geologist, architect, and/or landscape architect. Technical infeasibility may result from conditions including the following:

- (a) The infiltration rate of saturated in-situ soils is less than 0.45-3 inch per hour and it is not technically feasible to amend the in-situ soils to attain an infiltration rate necessary to achieve reliable performance of infiltration or bioretention BMPs in retaining the SWQDv on-site.
- (b) Locations where seasonal high ground water is within 5 to 10 feet of the surface,
- (c) Locations within 100 feet of a ground water well used for drinking water,
- (d) Brownfield development sites,
- (e) Other locations where pollutant mobilization is a documented concern,
- (f) Locations with potential geotechnical hazards, or
- (g) Smart growth and infill or redevelopment locations where the density and/ or nature of the project would create significant difficulty for compliance with the on-site volume retention requirement.

(3) To utilize alternative compliance measures to replenish ground water at an offsite location, the project applicant shall demonstrate why it is not advantageous to replenish ground water at the project site, and that the alternative measures shall also provide equal or greater water quality benefits to the receiving surface water than the Water Quality/Flow Reduction/Resource Management Criteria in Part VI.67.D.c.i.

(3) Alternative Compliance Measures

When a Permittee determines a project applicant has demonstrated that it is technically infeasible to retain 100 percent of the SWQDv on-site, or is proposing an alternative offsite project to replenish regional ground water supplies, the Permittee shall require one of the following mitigation options:

(1) On-site Biofiltration

- (a) If using biofiltration due to demonstrated technical infeasibility, then the new project must biofiltrate 1.5 times the portion of the SWQDv that is not reliably retained on-site, as calculated by Equation 1 below.

Equation 1:

$$B_v = 1.5 * [SWQD_v - R_v]$$

Where:

B_v = biofiltration volume

SWQD_v = the storm water runoff from a 0.75 inch, 24-hour storm or the 85th percentile storm, *whichever is greater*.

R_v = volume reliably retained on-site

(b) Conditions for On-site Biofiltration

- (i) Biofiltration systems shall meet the design specifications provided in Attachment H to this Order unless otherwise approved by the Regional Water Board Executive Officer.
- (ii) Biofiltration systems discharging to a receiving water that is included on the Clean Water Act section 303(d) list of impaired water quality-limited water bodies due to nitrogen compounds or related effects shall be designed and maintained to achieve enhanced nitrogen removal capability. See Attachment ~~I~~H for design criteria for underdrain placement to achieve enhanced nitrogen removal.

(2) Offsite Infiltration/~~Ground Water Replenishment/Bioretenion~~ Projects

- (a) Use infiltration, ~~ground water replenishment~~, or bioretention BMPs to intercept a volume of storm water runoff equal to the SWQD_v, less the volume of storm water runoff reliably retained on-site, at an approved offsite project, and
- (b) Provide pollutant reduction (treatment) of the storm water runoff discharged from the project site in accordance with the Water Quality Mitigation Criteria provided in Part VI.D.67.c.iv.
- (c) The required offsite mitigation volume shall be calculated by Equation 2 below and equal to:

Equation 2:

$$M_v = 1.0 * [SWQD_v - R_v]$$

Where:

M_v = mitigation volume

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SWQDv = runoff from the 0.75 inch, 24-hour storm event or the 85th percentile storm, *whichever is greater*

Rv = the volume of storm water runoff reliably retained on-site.

(3) Ground Water Replenishment Projects

Permittees may propose, in their Watershed Management Program or enhanced Watershed Management Program, regional projects to replenish regional ground water supplies at offsite locations, provided the groundwater supply has a designated beneficial use in the Basin Plan.

- (a) Regional groundwater replenishment projects must use infiltration, ground water replenishment, or bioretention BMPs to intercept a volume of storm water runoff equal to the SWQDv for new development and redevelopment projects, subject to Permittee conditioning and approval for the design and implementation of post-construction controls, within the approved project area, and
- (b) Provide pollutant reduction (treatment) of the storm water runoff discharged from development projects, within the project area, subject to Permittee conditioning and approval for the design and implementation of post-construction controls to mitigate storm water pollution in accordance with the Water Quality Mitigation Criteria provided in Part VI.D.7.c.iv.
- (c) Permittees implementing a regional ground water replenishment project in lieu of onsite controls shall ensure the volume of runoff captured by the project shall be equal to:

Equation 2:

$$\underline{Mv = 1.0 \cdot [SWQDv - Rv]}$$

Where:

Mv = mitigation volume

SWQDv = runoff from the 0.75 inch, 24-hour storm event or the 85th percentile storm, whichever is greater

Rv = the volume of storm water runoff reliably retained on-site.

- (d) Regional groundwater replenishment projects shall be located in the same sub-watershed (defined as draining to the same HUC-12 hydrologic area in the Basin Plan) as the new development or redevelopment projects which did not implement on site retention BMPs . Each Permittee may consider locations outside of the HUC-12 but within the HUC-10 subwatershed area if there are no opportunities within the HUC-12 subwatershed or if greater pollutant reductions and/or ground water replenishment can be achieved at a location

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within the expanded HUC-10 subwatershed. The use of a mitigation, ground water replenishment, or retrofit project outside of the HUC-12 subwatershed is subject to the approval of the Executive Officer of the Regional Water Board.

~~(3)~~(4) Offsite Project - Retrofit Existing Development

Use infiltration, bioretention, rainfall harvest and use and/or biofiltration BMPs to retrofit an existing development, with similar land uses as the new development or land uses associated with comparable or higher storm water runoff event mean concentrations (EMCs) than the new development. Comparison of EMCs for different land uses shall be based on published data from studies performed in southern California. The retrofit plan shall be designed and constructed to:

- (a) Intercept a volume of storm water runoff equal to the mitigation volume (Mv) as described above in Equation 2, except biofiltration BMPs shall be designed to meet the biofiltration volume as described in Equation 1 and
- (b) Provide pollutant reduction (treatment) of the storm water runoff from the project site as described in the Water Quality Mitigation Criteria provided in Part VI.D.67.c.iv.

~~(4)~~(5) Conditions for Offsite Projects

- (a) Project applicants seeking to utilize these alternative compliance provisions may propose other offsite projects, which the Permittees may approve if they meet the requirements of this subpart.
- (b) Location of offsite projects. Offsite projects shall be located in the same sub-watershed (defined as draining to the same HUC-12 hydrologic area in the Basin Plan) as the new development or redevelopment project. Each Permittee may consider locations outside of the HUC-12 but within the HUC-10 subwatershed area if there are no opportunities within the HUC-12 subwatershed or if greater pollutant reductions and/or ground water replenishment can be achieved at a location within the expanded HUC-10 subwatershed. The use of a mitigation, ground water replenishment, or retrofit project outside of the HUC-12 subwatershed is subject to the approval of the Executive Officer of the Regional Water Board.
- (c) Project applicant must demonstrate that equal benefits to ground water recharge cannot be met on the project site.
- (d) Each Permittee shall develop a prioritized list of offsite mitigation, ground water replenishment and/or retrofit projects, and when feasible, the mitigation must be directed to the highest priority project within the same HUC-12 or if approved by the Regional Water Board Executive Officer, the HUC-10 drainage area, as the new development project.

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- (e) Infiltration/bioretenion shall be the preferred LID BMP for offsite mitigation or ground water replenishment projects. Offsite retrofit projects may include green streets, parking lot retrofits, green roofs, and rainfall harvest and use. Biofiltration BMPs may be considered for retrofit projects when infiltration, bioretention or rainfall harvest and use is technically infeasible.
- (f) Each Permittee shall develop a schedule for the completion of offsite projects, including milestone dates to identify, fund, design, and construct the projects. Offsite projects shall be completed as soon as possible, and at the latest, within 4 years of the certificate of occupancy for the first project that contributed funds toward the construction of the offsite project, unless a longer period is otherwise authorized by the Executive Officer of the Regional Water Board. For public offsite projects, each Permittee must provide in their annual reports a summary of total offsite project funds raised to date and a description (including location, general design concept, volume of water expected to be retained, and total estimated budget) of all pending public offsite projects. Funding sufficient to address the offsite volume must be transferred to the Permittee (for public offsite mitigation projects) or to an escrow account (for private offsite mitigation projects) within one year of the initiation of construction.
- (g) Offsite projects must be approved by the Permittee and may be subject to approval by the Regional Water Board Executive Officer, if a third-party petitions the Executive Officer to review the project.
- (h) The project applicant must perform the offsite projects as approved by either the Permittee or the Regional Water Board Executive Officer or provide sufficient funding for public or private offsite projects to achieve the equivalent mitigation storm water volume.

(6) Regional Storm Water Mitigation Program

A Permittee or Permittee group may apply to the Regional Board for approval of a regional or sub-regional storm water mitigation program to substitute in part or wholly for New and Redevelopment requirements. Upon review and a determination by the Regional Board Executive Officer that the proposal is technically valid and appropriate, the Regional Board may consider for approval such a program if its implementation will:

- (a) Result in improved storm water quality;
(b) Protect stream habitat;
(c) Promote cooperative problem solving by diverse interests;
(d) Be fiscally sustainable and has secure funding; and
(e) Be completed in five years including the construction and start-up of treatment facilities.

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(f) Nothing in this provision shall be construed as to delay the implementation of requirements for new and redevelopment, as approved in this Order.

(h)
(4)(7) Water Quality Mitigation Criteria

(1) Each Permittee shall require all New Development and Redevelopment projects that have been approved for offsite mitigation or ground water replenishment projects as defined in Part VI.D.67.c.ii-iii to also provide treatment of storm water runoff from the project site. Each Permittee shall require these projects to design and implement post-construction storm water BMPs and control measures to reduce pollutant loading as necessary to:

- (a) Meet the pollutant specific benchmarks listed in Table 11 at the treatment systems outlet or prior to the discharge to the MS4, and
- (b) Ensure that the discharge does not cause or contribute to an exceedance of water quality standards at the Permittee’s downstream MS4 outfall.

(2) Each Permittee may allow the project proponent to install flow-through modular treatment systems including sand filters, or other proprietary BMP treatment systems including planter boxes, with a demonstrated efficiency at least equivalent to a sand filter. The sizing of the flow through treatment device shall be based on a rainfall intensity of:

- (a) 0.2 inches per hour, or
- (b) The one year, one-hour rainfall intensity as determined from the most recent Los Angeles County isohyetal map, *whichever is greater*.

Table 11. Benchmarks Applicable to New Development Treatment BMPs³⁰

Conventional Pollutants

Pollutant	Suspended Solids mg/L	Total P mg/L	Total N mg/L	Total Nitrate mg/L	TKN mg/L	TOC mg/L
Effluent Concentration	4014	0.4013	1.0928	0.23	1.0409	43

Metals

³⁰ The treatment control BMP performance standards were developed from the median effluent water quality values of the ~~three~~ six highest performing BMPs, per pollutant, in the storm water BMP database (<http://www.bmpdatabase.org/>, last visited ~~May 15~~ September 25, 2012).

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Pollutant	Total Cd µg/L	Total Cu µg/L	Total Cr µg/L	Total Pb µg/L	Total Zn µg/L
Effluent Concentration	0.3	<u>76</u>	<u>2.68</u>	<u>2.05</u>	<u>4823</u>

(3) In addition to the requirements for controlling pollutant discharges as described in Part VI.D.67.iv. and the treatment requirements described above, each Permittee shall ensure that the new development or redevelopment will not cause or contribute to an exceedance of applicable water quality-based effluent limitations established in Part VI.E pursuant to Total Maximum Daily Loads (TMDLs).

~~(5)~~(8) Hydromodification (Flow/ Volume/ Duration) Control Criteria

(1) Each Permittee shall require all New Development and Redevelopment projects located within natural drainage systems as described in Part VI.D.67.v.(1)(a)(iii) to implement hydrologic control measures, to prevent accelerated downstream erosion and to protect stream habitat in natural drainage systems. The purpose of the hydrologic controls is to minimize changes in post-development hydrologic storm water runoff discharge rates, velocities, and duration. This shall be achieved by maintaining the project's pre-project storm water runoff flow rates and durations.

(a) Description

- (i) Hydromodification control in natural drainage systems shall be achieved by maintaining the Erosion Potential (Ep) in streams at a value of 1, unless an alternative value can be shown to be protective of the natural drainage systems from erosion, incision, and sedimentation that can occur as a result of flow increases from impervious surfaces and prevent damage to stream habitat in natural drainage system tributaries (see Attachment J - Determination of Erosion Potential).
- (ii) Hydromodification control may include one, or a combination of on-site, regional or sub-regional hydromodification control BMPs, LID strategies, or stream and riparian buffer restoration measures. Any in-stream restoration measure shall not adversely affect the beneficial uses of the natural drainage systems.
- (iii) Natural drainage systems that are subject to the hydromodification assessments and controls as described in this Part of the Order, include all drainages that have not been improved (e.g., channelized or armored with concrete, shotcrete, or rip-rap) or drainage systems that are tributary to a natural drainage system, except as provided in Part VI.D.67.v.(1)(b)--Exemptions to Hydromodification Controls [see below]. The clearing or dredging of a natural drainage system does not constitute an "improvement."

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(iv) Until the State Water Board or the Regional Water Board adopts a final Hydromodification Policy or criteria, Permittees shall implement the ~~Interim~~ Hydromodification Control Criteria described in Part VI.D.67.v.(1)(c) to control the potential adverse impacts of changes in hydrology that may result from new development and redevelopment projects located within natural drainage systems as described in Part VI.D.67.v.(1)(a)(iii).

(b) Exemptions to Hydromodification Controls. Permittees may exempt the following New Development and Redevelopment projects from implementation of hydromodification controls where assessments of downstream channel conditions and proposed discharge hydrology indicate that adverse hydromodification effects to ~~present and future~~ beneficial uses of Natural Drainage Systems are unlikely:

(i) Projects that are replacement, maintenance or repair of a Permittee’s existing flood control facility, storm drain, or transportation network.

(ii) Redevelopment Projects in the Urban Core that do not increase the effective impervious area or decrease the infiltration capacity of pervious areas compared to the pre-project conditions.

(iii) Projects that have any increased discharge directly or via a storm drain to a sump, lake, area under tidal influence, into a waterway that has a 100-year peak flow (Q100) of 25,000 cfs or more, or other receiving water that is not susceptible to hydromodification impacts.

(iv) Projects that discharge directly or via a storm drain into concrete or otherwise engineered (not natural) channels (e.g., channelized or armored with rip rap, shotcrete, etc.), which, in turn, discharge into receiving water that is not susceptible to hydromodification impacts (as in Parts VI.D.67.v.(1)(b)(i)-(iii) above).

~~—LID BMPs implemented on single family homes are sufficient to comply with Hydromodification criteria.~~

~~(iv)(v)~~

(c) ~~Interim~~—Hydromodification Control Criteria. The ~~Interim~~ Hydromodification Control Criteria to protect natural drainage systems until the State or Regional Water Board adopts a final Hydromodification Policy or criteria are as follows:

(i) Except as provided for in Part VI.D.67.v.(1)(b), projects disturbing an area greater than 1 acre but less than 50 acres within natural drainage systems will be presumed to meet pre-development hydrology if one of the following demonstrations is made:

1. The project is designed to retain on-site, through infiltration, evapotranspiration, and/or harvest and use, the storm water volume from the runoff of the 95th percentile, 24-hour storm, or
 2. The runoff flow rate, volume, velocity, and duration for the post-development condition do not exceed the pre-development condition for the 2-year, 24-hour rainfall event. This condition may be substantiated by simple screening models, including those described in *Hydromodification Effects on Flow Peaks and Durations in Southern California Urbanizing Watersheds* (Hawley et al., 2011) or other models acceptable to the Executive Officer of the Regional Water Board, or
 3. The Erosion Potential (Ep) in the receiving water channel will approximate 1, as determined by a Hydromodification Analysis Study and the equation presented in Attachment J. Alternatively, Permittees can opt to use other work equations to calculate Erosion Potential with Executive Officer approval.
- (ii) Projects disturbing 50 acres or more within natural drainage systems will be presumed to meet pre-development hydrology based on the successful demonstration of one of the following conditions:
1. The site infiltrates on-site at least the runoff from a 2-year, 24-hour storm event, or
 2. The runoff flow rate, volume, velocity, and duration for the post-development condition does not exceed the pre-development condition for the 2-year, 24-hour rainfall events. These conditions must be substantiated by hydrologic modeling acceptable to the Regional Water Board Executive Officer, or
 3. The Erosion Potential (Ep) in the receiving water channel will approximate 1, as determined by a Hydromodification Analysis Study and the equation presented in Attachment J.

~~(d)~~(c) Final Alternative Hydromodification Criteria

(i) Permittees may satisfy the requirement for Hydromodification Controls by implementing the hydromodification requirements in the County of Los Angeles Low Impact Development Manual (2009) for all projects disturbing an area greater than 1 acre within natural drainage systems.

(i)(ii) Each Permittee may alternatively shall develop and implement watershed specific Hydromodification Control Plans (HCPs). Such plans shall be developed no later than 180 days one year after the

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~~State Water Board issues final a Hydromodification Policy or criteria~~ the effective date of this Order.

~~(ii)~~(iii) The HCP shall identify:

1. Stream classifications
2. Flow rate and duration control methods
3. Sub-watershed mitigation strategies
4. Stream and/or riparian buffer restoration measures, which will maintain the stream and tributary Erosion Potential at 1 unless an alternative value can be shown to be protective of the natural drainage systems from erosion, incision, and sedimentation that can occur as a result of flow increases from impervious surfaces and prevent damage to stream habitat in natural drainage system tributaries.

~~(iii)~~(iv) The HCP shall contain the following elements:

1. Hydromodification Management Standards
2. Natural Drainage Areas and Hydromodification Management Control Areas
3. New Development and Redevelopment Projects subject to the HCP
4. Description of authorized Hydromodification Management Control BMPs
5. Hydromodification Management Control BMP Design Criteria
6. For flow duration control methods, the range of flows to control for, and goodness of fit criteria
7. Allowable low critical flow, Q_c , which initiates sediment transport
8. Description of the approved Hydromodification Model
9. Any alternate Hydromodification Management Model and Design
10. Stream Restoration Measures Design Criteria
11. Monitoring and Effectiveness Assessment
12. Record Keeping
13. The HCP shall be deemed in effect upon Executive Officer approval.

~~(6)~~(9) Watershed Equivalence.

Regardless of the methods through which Permittees allow project applicants to implement alternative compliance measures, the subwatershed-wide

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(defined as draining to the same HUC-12 hydrologic area in the Basin Plan) result of all development must be at least the same level of water quality protection as would have been achieved if all projects utilizing these alternative compliance provisions had complied with Part VI.D.67.c.i (Integrated Water Quality/Flow Reduction/Resource Management Criteria).

~~(7)~~(10) Annual Report

Each Permittee shall provide in their annual report to the Regional Water Board a list of mitigation project descriptions and estimated pollutant and flow reduction analyses (compiled from design specifications submitted by project applicants and approved by the Permittee(s)). Within 4 years of Order adoption, Permittees must submit in their Annual Report, a comparison of the expected aggregate results of alternative compliance projects to the results that would otherwise have been achieved by retaining on site the SWQDv.

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d. Implementation**i. Local Ordinance Equivalence**

A Permittee that has adopted a local LID ordinance prior to the adoption of this Order, and which includes a retention requirement numerically equal to the 0.75-inch, 24-hour rain event or the 85th percentile, 24-hour rain event, whichever is greater, may submit documentation to the Regional Water Board that the alternative requirements in the local ordinance will provide equal or greater reduction in storm water discharge pollutant loading and volume as would have been obtained through strict conformance with Part VI.D.67.c.i. (Integrated Water Quality/Flow Reduction Resources Management Criteria) or Part VI.D.67.c.ii. (Alternative Compliance —Measures for Technical Infeasibility or Opportunity for Regional -Ground water Replenishment) of this Order and, if applicable, Part VI.D.67.c.v. (Hydromodification (Flow/Volume Duration) Control Criteria).

- (1) Documentation shall be submitted within 180 days after the effective date of this Order.
- (2) The Regional Board shall provide public notice of the proposed equivalency determination and a minimum 30-day period for public comment. After review and consideration of public comments, The the Regional Water Board Executive Officer will determine whether implementation of the local ordinance provides equivalent pollutant control to the applicable provisions of this Order. Local ordinances that do not strictly conform to the provisions of this Order must be approved by the Regional Water Board Executive Officer as being “equivalent” in effect to the applicable provisions of this Order in order to substitute for the requirements in Parts VI.D.67.c.i and, where applicable, VI.D.76.c.v.
- (3) Where the Regional Water Board Executive Officer determines that a Permittee’s local LID ordinance does not provide equivalent pollutant control, the Permittee shall either
 - (a) Require conformance with Parts VI.D.67.c.i and, where applicable, VI.D.67.c.v, or
 - (b) Update its local ordinance to conform to the requirements herein within two years of the effective date of this Order.

ii. Project Coordination

- (1) Each Permittee shall facilitate a process for effective approval of post-construction storm water control measures. The process shall include:

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- (a) Detailed LID site design and BMP review including BMP sizing calculations, BMP pollutant removal performance, and municipal approval; and
- (b) An established structure for communication and delineated authority between and among municipal departments that have jurisdiction over project review, plan approval, and project construction through memoranda of understanding or an equivalent agreement.

iii. Maintenance Agreement and Transfer

- (1) Prior to issuing approval for final occupancy, each Permittee shall require that all new development and redevelopment projects subject to post-construction BMP requirements, with the exception of simple LID BMPs implemented on single family residences, provide an operation and maintenance plan, monitoring plan, where required, and verification of ongoing maintenance provisions for LID practices, Treatment Control BMPs, and Hydromodification Control BMPs including but not limited to: final map conditions, legal agreements, covenants, conditions or restrictions, CEQA mitigation requirements, conditional use permits, and/or other legally binding maintenance agreements. Permittees shall require maintenance records be kept on site for treatment BMPs implemented on single family residences.

- (a) Verification at a minimum shall include the developer's signed statement accepting responsibility for maintenance until the responsibility is legally transferred; and either:

- (i) A signed statement from the public entity assuming responsibility for BMP maintenance; or
- (ii) Written conditions in the sales or lease agreement, which require the property owner or tenant to assume responsibility for BMP maintenance and conduct a maintenance inspection at least once a year; or
- (iii) Written text in project covenants, conditions, and restrictions (CCRs) for residential properties assigning BMP maintenance responsibilities to the Home Owners Association; or

- (iv) Any other legally enforceable agreement or mechanism that assigns responsibility for the maintenance of BMPs.

- (b) Each Permittee shall require all development projects subject to post-construction BMP requirements to provide a plan for the operation and maintenance of all structural and treatment controls. The plan shall be submitted for examination of relevance to keeping the BMPs in proper working order. Where BMPs are transferred to Permittee for ownership and maintenance, the plan shall also include all relevant costs for upkeep of BMPs in the transfer. Operation and Maintenance plans for

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private BMPs shall be kept on-site for periodic review by Permittee inspectors.

iv. Tracking, Inspection, and Enforcement of Post-Construction BMPs

(1) Each Permittee shall implement a tracking system and an inspection and enforcement program for new development and redevelopment post-construction storm water no later than 60 days after Order adoption date.

(a) Implement a GIS or other electronic system for tracking projects that have been conditioned for post-construction BMPs. The electronic system, at a minimum, should contain the following information:

- (i) Municipal Project ID
- (ii) State WDID No.
- (iii) Project Acreage
- (iv) BMP Type and Description
- (v) BMP Location (coordinates)
- (vi) Date of Acceptance
- (vii) Date of Maintenance Agreement
- (viii) Maintenance Records
- (ix) Inspection Date and Summary
- (x) Corrective Action
- (xi) Date Certificate of Occupancy Issued
- (xii) Replacement or Repair Date

(b) Inspect all development sites upon completion of construction and prior to the issuance of occupancy certificates to ensure proper installation of LID measures, structural BMPs, treatment control BMPs and hydromodification control BMPs. The inspection may be combined with other inspections provided it is conducted by trained personnel.

(c) Verify proper maintenance and operation of post-construction BMPs previously approved for new development and redevelopment and operated by the Permittee. The post-construction BMP maintenance inspection program shall incorporate the following elements:

- (i) The development of a Post-construction BMP Maintenance Inspection checklist

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- (ii) Inspection at least once every 2 years after project completion, of post-construction BMPs to assess operation conditions with particular attention to criteria and procedures for post-construction treatment control and hydromodification control BMP repair, replacement, or re-vegetation.
- (d) For post-construction BMPs operated and maintained by parties other than the Permittee, the Permittee shall require ~~annual reports by the other parties to demonstrating document~~ proper maintenance and operations.
- (e) Undertake enforcement action per the established Progressive Enforcement Policy as appropriate based on the results of the inspection. See Part VI.D.2 for requirements for the development and implementation of a Progressive Enforcement Policy.

7.8. Development Construction Program

- a. Each Permittee shall develop, implement, and enforce a construction program that:
 - i. Prevents illicit construction-related discharges of pollutants into the MS4 and receiving waters.
 - ii. Implements and maintains structural and non-structural BMPs to reduce pollutants in storm water runoff from construction sites.
 - iii. Reduces construction site discharges of pollutants to the MS4 to the MEP.
 - iv. Prevents construction site discharges to the MS4 from causing or contributing to a violation of water quality standards.
- b. Each Permittee shall establish for its jurisdiction an enforceable erosion and sediment control ordinance for all construction sites that disturb soil.

b.

c. Applicability

The provisions contained in Part VI.D.78.d below apply exclusively to construction sites less than 1 acre. Provisions contained in Part VI.D.78.e – j, apply exclusively to construction sites 1 acre or greater. The requirements contained in this part apply to all activities involving soil disturbance with the exception of agricultural activities. Activities covered by this permit include but are not limited to grading, vegetation clearing, soil compaction, paving, re-paving and linear underground/overhead projects (LUPs).

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d. Requirements for Construction Sites Less than One Acre

i. For construction sites less than 1 acre, each Permittee shall:

- (1) Through the use of the Permittee’s erosion and sediment control ordinance or and/or building permit, require the implementation of an effective combination of erosion and sediment control BMPs from Table 12 to prevent erosion and sediment loss, and the discharge of construction wastes.

Table 12. ~~Minimum~~ Applicable Set of BMPs for All Construction Sites

Erosion Controls	Scheduling
	Preservation of Existing Vegetation
Sediment Controls	Silt Fence
	Sand Bag Barrier
	Stabilized Construction Site Entrance/Exit
Non-Storm Water Management	Water Conservation Practices
	Dewatering Operations
Waste Management	Material Delivery and Storage
	Stockpile Management
	Spill Prevention and Control
	Solid Waste Management
	Concrete Waste Management
	Sanitary/Septic Waste Management

- (2) Possess the ability to identify all construction sites with soil disturbing activities that require a permit, regardless of size, and shall be able to provide a list of permitted sites upon request of the Regional Water Board. Permittees may use existing permit databases or other tracking systems to comply with these requirements.
- (3) Inspect construction sites on as needed based on the evaluation of the factors that are a threat to water quality. In evaluating the threat to water quality, the following factors shall be considered: soil erosion potential; site slope; project size and type; sensitivity of receiving water bodies; proximity to receiving water bodies; non-storm water discharges; past record of non-compliance by the operators of the construction site; and any water quality issues relevant to the particular MS4.
- (4) Implement the Permittee’s Progressive Enforcement Policy to ensure that construction sites are brought into compliance with the erosion and sediment control ordinance within a reasonable time period. See Part VI.D.2 for requirements for the development and implementation of a Progressive Enforcement Policy.

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- e. Each Permittee shall require operators of public and private construction sites within its jurisdiction to select, install, implement, and maintain BMPs that comply with its erosion and sediment control ordinance.
- f. The requirements contained in this part apply to all activities involving soil disturbance with the exception of agricultural activities. Activities covered by this permit include but are not limited to grading, vegetation clearing, soil compaction, paving, re-paving and linear underground/overhead projects (LUPs).

g. Construction Site Inventory / Electronic Tracking System

- i. Each Permittee shall use an electronic system to inventory grading permits, encroachment permits, demolition permits, building permits, or construction permits (and any other municipal authorization to move soil and/ or construct or destruct that involves land disturbance) issued by the Permittee. To satisfy this requirement, the use of a database or GIS system is recommended.
- ii. Each Permittee shall complete an inventory and continuously update as new sites are permitted and sites are completed. The inventory / tracking system shall contain, at a minimum:
 - (1) Relevant contact information for each project (e.g., name, address, phone, email, etc. for the owner and contractor.
 - (2) The basic site information including location, status, size of the project and area of disturbance.
 - (3) The proximity all water bodies, water bodies listed as impaired by sediment-related pollutants, and water bodies for which a sediment-related TMDL has been adopted and approved by USEPA.
 - (4) Significant threat to water quality status, based on consideration of factors listed in Appendix 1 to the Statewide General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit).
 - (5) Current construction phase where feasible.
 - (6) The required inspection frequency.
 - (7) The project start date and anticipated completion date.
 - (8) Whether the project has submitted a Notice of Intent and obtained coverage under the Construction General Permit.
 - (9) The date the Permittee approved the Erosion and Sediment Control Plan (ESCP).
 - (10) Post-Construction Structural BMPs subject to Operation and Maintenance Requirements.

h. Construction Plan Review and Approval Procedures

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- i. Each Permittee shall develop procedures to review and approve relevant construction plan documents.
- ii. The review procedures shall be developed and implemented such that the following minimum requirements are met:
 - (1) Prior to issuing a grading or building permit, each Permittee shall require each operator of a construction activity within its jurisdiction to prepare and submit an ESCP prior to the disturbance of land for the Permittee's review and written approval. The construction site operator shall be prohibited from commencing construction activity prior to receipt of written approval by the Permittee. Each Permittee shall not approve any ESCP unless it contains appropriate site-specific construction site BMPs that meet the minimum requirements of a Permittee's erosion and sediment control ordinance.
 - (2) ESCPs must include the elements of a Storm Water Pollution Prevention Plan (SWPPP). SWPPPs prepared in accordance with the requirements of the Construction General Permit can be accepted as ESCPs.
 - (3) At a minimum, the ESCP must address the following elements:
 - (a) Methods to minimize the footprint of the disturbed area and to prevent soil compaction outside of the disturbed area.
 - (b) Methods used to protect native vegetation and trees.
 - (c) Sediment/Erosion Control.
 - (d) Controls to prevent tracking on and off the site.
 - (e) Non-storm water controls (e.g., vehicle washing, dewatering, etc.).
 - (f) Materials Management (delivery and storage).
 - (g) Spill Prevention and Control.
 - (h) Waste Management (e.g., concrete washout/waste management; sanitary waste management).
 - (i) Identification of site Risk Level as identified per the requirements in Appendix 1 of the Construction General Permit.
 - (4) The ESCP must include the rationale for the selection and design of the proposed BMPs, including quantifying the expected soil loss from different BMPs.
 - (5) Each Permittee shall require that the ESCP is developed and certified by a Qualified SWPPP Developer (QSD).
 - (6) Each Permittee shall require that all structural BMPs be designed by a licensed California Engineer.
 - (7) Each Permittee shall require that for all sites, the landowner or the landowner's agent sign a statement on the ESCP as follows:

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(a) "I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that submitting false and/ or inaccurate information, failing to update the ESCP to reflect current conditions, or failing to properly and/ or adequately implement the ESCP may result in revocation of grading and/ or other permits or other sanctions provided by law."

(8) Prior to issuing a grading or building permit, each Permittee must verify that the construction site operators have existing coverage under applicable permits, including, but not limited to the State Water Board's Construction General Permit, and State Water Board 401 Water Quality Certification, ~~U.S. Army Corp 404 permit, and California Department of Fish and Game 1600 Agreement.~~

(9) Each Permittee shall develop and implement a checklist to be used to conduct and document review of each ESCP.

i. BMP Implementation Level

i. Each Permittee shall implement technical standards for the selection, installation and maintenance of construction BMPs for all construction sites within its jurisdiction.

ii. The BMP technical standards shall require:

(1) The use of BMPs that are tailored to the risks posed by the project. Sites are to be ranked from Low Risk (Risk 1) to High Risk (Risk 3). Project risks are to be calculated based on the potential for erosion from the site and the sensitivity of the receiving water body. Receiving water bodies that are listed on the Clean Water Act (CWA) Section 303(d) list for sediment or siltation are considered High Risk. Likewise, water bodies with designated beneficial uses of SPWN, COLD, and MIGR are also considered to be High Risk. The combined (sediment/receiving water) site risk shall be calculated using the methods provided in Appendix 1 of the Construction General Permit. At a minimum, the BMP technical standards shall include requirements for High Risk sites as defined in Table 15.

(2) The use of BMPs for all construction sites, sites equal or greater to 1 acre, and for paving projects per Tables 14 and 16 of this Order.

(3) Detailed installation designs and cut sheets for use within ESCPs.

(4) Maintenance expectations for each BMP, or category of BMPs, as appropriate.

iii. Permittees are encouraged to adopt respective BMPs from latest versions of the *California BMP Handbook, Construction* or *Caltrans Stormwater Quality*

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Handbooks, Construction Site Best Management Practices (BMPs) Manual and addenda. Alternatively, Permittees are authorized to develop or adopt equivalent BMP standards consistent for Southern California and for the range of activities presented below in Tables 13 through 16.

- iv. The local BMP technical standards shall be readily available to the development community and shall be clearly referenced within each Permittee’s storm water or development services website, ordinance, permit approval process and/or ESCP review forms. The local BMP technical standards shall also be readily available to the Regional Water Board upon request.
- v. Local BMP technical standards shall be available for the following:

Table 13. Minimum Set of BMPs for All Construction Sites

Erosion Controls	Scheduling
	Preservation of Existing Vegetation
Sediment Controls	Silt Fence
	Sand Bag Barrier
	Stabilized Construction Site Entrance/Exit
Non-Storm Management	water Water Conservation Practices
	Dewatering Operations
Waste Management	Material Delivery and Storage
	Stockpile Management
	Spill Prevention and Control
	Solid Waste Management
	Concrete Waste Management
	Sanitary/Septic Waste Management

Table 14. Additional BMPs Applicable to Construction Sites Disturbing 1 Acre or More

Erosion Controls	Hydraulic Mulch
	Hydroseeding
	Soil Binders
	Straw Mulch
	Geotextiles and Mats
	Wood Mulching
Sediment Controls	Fiber Rolls
	Gravel Bag Berm
	Street Sweeping and/ or Vacuum
	Storm Drain Inlet Protection
	Scheduling
	Check Dam
Additional Controls	Wind Erosion Controls
	Stabilized Construction Entrance/ Exit
	Stabilized Construction Roadway

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	Entrance/ Exit Tire Wash
Non-Storm Management	water Vehicle and Equipment Washing
	Vehicle and Equipment Fueling
	Vehicle and Equipment Maintenance
Waste Management	Material Delivery and Storage
	Spill Prevention and Control

Table 15. Additional Enhanced BMPs for High Risk Sites

Erosion Controls	Hydraulic Mulch
	Hydroseeding
	Soil Binders
	Straw Mulch
	Geotextiles and Mats
	Wood Mulching
	Slope Drains
Sediment Controls	Silt Fence
	Fiber Rolls
	Sediment Basin
	Check Dam
	Gravel Bag Berm
	Street Sweeping and/or Vacuum
	Sand Bag Barrier
	Storm Drain Inlet Protection
Additional Controls	Wind Erosion Controls
	Stabilized Construction Entrance/Exit
	Stabilized Construction Roadway
	Entrance/Exit Tire Wash
	Advanced Treatment Systems*
Non-Storm water Management	Water Conservation Practices
	Dewatering Operations (Ground water dewatering only under NPDES Permit No. CAG994004)
	Vehicle and Equipment Washing
	Vehicle and Equipment Fueling
	Vehicle and Equipment Maintenance
Waste Management	Material Delivery and Storage
	Stockpile Management
	Spill Prevention and Control
	Solid Waste Management

* Applies to public roadway projects.

Table 16. Minimum Required BMPs for Roadway Paving or Repair Operation (For Private or Public Projects)

1.	Restrict paving and repaving activity to exclude periods of rainfall or
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	predicted rainfall unless required by emergency conditions.
2.	Install gravel bags and filter fabric or other equivalent inlet protection at all susceptible storm drain inlets and at manholes to prevent spills of paving products and tack coat.
3.	Prevent the discharge of release agents including soybean oil, other oils, or diesel to the storm water drainage system or receiving waters.
4.	Minimize non storm water runoff from water use for the roller and for evaporative cooling of the asphalt.
5.	Clean equipment over absorbent pads, drip pans, plastic sheeting or other material to capture all spillage and dispose of properly.
6.	Collect liquid waste in a container, with a secure lid, for transport to a maintenance facility to be reused, recycled or disposed of properly.
7.	Collect solid waste by vacuuming or sweeping and securing in an appropriate container for transport to a maintenance facility to be reused, recycled or disposed of properly.
8.	Cover the “cold-mix” asphalt (i.e., pre-mixed aggregate and asphalt binder) with protective sheeting during a rainstorm.
9.	Cover loads with tarp before haul-off to a storage site, and do not overload trucks.
10.	Minimize airborne dust by using water spray or other approved dust suppressant during grinding.
11.	Avoid stockpiling soil, sand, sediment, asphalt material and asphalt grindings materials or rubble in or near storm water drainage system or receiving waters.
12.	Protect stockpiles with a cover or sediment barriers during a rain.

j. Construction Site Inspection

- i. Each Permittee shall use its legal authority to implement procedures for inspecting public and private construction sites.
- ii. The inspection procedures shall be implemented as follows:
 - (1) Inspect the public and private construction sites as specified in Table 17 below:

Table 17. Inspection Frequencies for Sites One Acre or Greater

Site	Inspection Frequency Shall Occur
a. All sites 1 acre or larger that discharge to a tributary listed by the state as an impaired water for sediment or turbidity under the CWA § 303(d)	(1) when two or more consecutive days with greater than 50% chance of rainfall are predicted by NOAA ³¹ , (2) within 48 hours of a ½-inch rain

³¹ www.srh.noaa.gov/forecast

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b. Other sites 1 acre or more determined to be a significant threat to water quality ³²	event and at (3) least once every two weeks
c. All other construction sites with 1 acre or more of soil disturbance not meeting the criteria above	At least monthly

(2) Each Permittee shall inspect all phases of construction as follows:

(a) Prior to Land Disturbance

Prior to allowing an operator to commence land disturbance, each Permittee shall perform an inspection to ensure all necessary erosion and sediment structural and non-structural BMP materials and procedures are available per the erosion and sediment control plan.

(b) During Active Construction, including Land Development³³ and Vertical Construction³⁴

In accordance with the frequencies specified in Part VI.D.78.j and Table 17 of this Order, each Permittee shall perform an inspection to ensure all necessary erosion and sediment structural and non-structural BMP materials and procedures are available per the erosion and sediment control plan throughout the construction process.

(c) Final Landscaping / Site Stabilization³⁵

At the conclusion of the project and as a condition of approving and/or issuing a Certificate of Occupancy, each Permittee shall inspect the constructed site to ensure that all graded areas have reached final stabilization and that all trash, debris, and construction materials, and temporary erosion and sediment BMPs are removed.

(3) Based on the required frequencies above, each construction project shall be inspected a minimum of three times.

(4) Inspection Standard Operating Procedures

Each Permittee shall develop, implement, and revise as necessary, standard operating procedures that identify the inspection procedures each Permittee will follow. Inspections of construction sites, and the standard operating procedures, shall include, but are not limited to:

³² In evaluating the threat to water quality, the following factors shall be considered: soil erosion potential; site slope; project size and type; sensitivity of receiving water bodies; proximity to receiving water bodies; non-storm water discharges; past record of non-compliance by the operators of the construction site; and any water quality issues relevant to the particular MS4.

³³ Activities include cuts and fills, rough and finished grading; alluvium removals; canyon cleanouts; rock undercuts; keyway excavations; stockpiling of select material for capping operations; and excavation and street paving, lot grading, curbs, gutters and sidewalks, public utilities, public water facilities including fire hydrants, public sanitary sewer systems, storm sewer system and/or other drainage improvement.

³⁴ The build out of structures from foundations to roofing, including rough landscaping.

³⁵ All soil disturbing activities at each individual parcel within the site have been completed.

REVISITED TENTATIVE

- (a) Verification of active coverage under the Construction General Permit for sites disturbing 1 acre or more, or that are part of a planned development that will disturb 1 acre or more and a process for referring non-filers to the Regional Water Board.
- (b) Review of the applicable ESCP and inspection of the construction site to determine whether all BMPs have been selected, installed, implemented, and maintained according to the approved plan and subsequent approved revisions.
- (c) Assessment of the appropriateness of the planned and installed BMPs and their effectiveness.
- (d) Visual observation and record keeping of non-storm water discharges, potential illicit discharges and connections, and potential discharge of pollutants in storm water runoff.
- (e) Development of a written or electronic inspection report generated from an inspection checklist used in the field.
- (f) Tracking of the number of inspections for the inventoried construction sites throughout the reporting period to verify that the sites are inspected at the minimum frequencies required in Table 17 of this Order.

k. Enforcement

Each Permittee shall implement its Progressive Enforcement Policy to ensure that construction sites are brought into compliance with all storm water requirements within a reasonable time period. See Part VI.D.2 for requirements for the development and implementation of a Progressive Enforcement Policy.

l. Permittee Staff Training

- i. Each Permittee shall ensure that all staff whose primary job duties are related to implementing the construction storm water program are adequately trained.
- ii. Each Permittee may conduct in-house training or contract with consultants. Training shall be provided to the following staff positions of the MS4:

(1) Plan Reviewers and Permitting Staff

Ensure staff and consultants are trained as qualified individuals, knowledgeable in the technical review of local erosion and sediment control ordinance, local BMP technical standards, ESCP requirements, and the key objectives of the State Water Board QSD program. Permittees may provide internal training to staff or require staff to obtain QSD certification.

(2) Erosion Sediment Control/Storm Water Inspectors

Each Permittee shall ensure that its inspectors are knowledgeable in inspection procedures consistent with the State Water Board sponsored

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program QSD or a Qualified SWPPP Practitioner (QSP) or that a designated person on staff who has been trained in the key objectives of the QSD/QSP programs supervises inspection operations. Each Permittee may provide internal training to staff or require staff to obtain QSD/QSP certification. Each inspector must be knowledgeable of the local BMP technical standards and ESCP requirements.

(3) Third-Party Plan Reviewers, Permitting Staff, and Inspectors

If the Permittee utilizes outside parties to conduct inspections and/or review plans, each Permittee shall ensure these staff are trained per the requirements listed above. Outside contractors can self-certify, providing they certify they have received all applicable training required in the Permit and have documentation to that effect.

8.9. Public Agency Activities Program

a. Each Permittee shall implement a Public Agency Activities Program to minimize storm water pollution impacts from Permittee-owned or operated facilities and activities and to identify opportunities to reduce storm water pollution impacts from areas of existing development. Requirements for Public Agency Facilities and Activities consist of the following components:

- i. Public Construction Activities Management
- ii. Public Facility Inventory
- iii. Inventory of Existing Development for Retrofitting Opportunities
- iv. Public Facility and Activity Management
- v. Vehicle and Equipment Wash Areas
- vi. Landscape, Park, and Recreational Facilities Management
- vii. Storm Drain Operation and Maintenance
- viii. Streets, Roads, and Parking Facilities Maintenance
- ix. Emergency Procedures
- x. Municipal Employee and Contractor Training

b. Public Construction Activities Management

- i. Each Permittee shall implement and comply with the Planning and Land Development Program requirements in Part VI.D.6-7 of this Order at Permittee-owned or operated (i.e., public or Permittee sponsored) construction projects that are categorized under the project types identified in Part VI.D.67.b of this Order.
- ii. Each Permittee shall implement and comply with the appropriate Development Construction Program requirements in Part VI.D.7-8 of this Order at Permittee-owned or operated construction projects as applicable.

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- iii. For Permittee-owned or operated projects (including those under a capital improvement project plan) that disturb less than one acre of soil, each Permittee shall require an effective combination of erosion and sediment control BMPs from Table 13 (see Construction Development Program, minimum BMPs).
- iv. Each Permittee shall obtain separate coverage under the Construction General Permit for all Permittee-owned or operated construction sites that require coverage.
- c. Public Facility Inventory**
- i. Each Permittee shall maintain an updated inventory of all Permittee-owned or operated (i.e., public) facilities within its jurisdiction that are potential sources of storm water pollution. The incorporation of facility information into a GIS is recommended. Sources to be tracked include but are not limited to the following:
- (1) Animal control facilities
 - (2) Chemical storage facilities
 - (3) Composting facilities
 - (4) Equipment storage and maintenance facilities (including landscape maintenance-related operations)
 - (5) Fueling or fuel storage facilities (including municipal airports)
 - (6) Hazardous waste disposal facilities
 - (7) Hazardous waste handling and transfer facilities
 - (8) Incinerators
 - (9) Landfills
 - (10) Materials storage yards
 - (11) Pesticide storage facilities
 - (12) Fire stations
 - (13) Public restrooms
 - (14) Public parking lots
 - (15) Public golf courses
 - (16) Public swimming pools
 - (17) Public parks
 - (18) Public works yards
 - (19) Public marinas
 - (20) Recycling facilities
 - (21) Solid waste handling and transfer facilities

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- (22) Vehicle storage and maintenance yards
 - (23) Storm water management facilities (e.g., detention basins)
 - (24) All other Permittee-owned or operated facilities or activities that each Permittee determines may contribute a substantial pollutant load to the MS4.
- ii. Each Permittee shall include the following minimum fields of information for each Permittee-owned or operated facility in its inventory.
 - (1) Name of facility
 - (2) Name of facility manager and contact information
 - (3) Address of facility (physical and mailing)
 - (4) A narrative description of activities performed and potential pollution sources.
 - (5) Coverage under the Industrial General Permit or other individual or general NPDES permits or any applicable waiver issued by the Regional or State Water Board pertaining to storm water discharges.
 - iii. Each Permittee shall update its inventory at least ~~twice~~ once during the 5-year term of the Order. The update shall be accomplished through collection of new information obtained through field activities or through other readily available inter and intra-agency informational databases (e.g., property management, land-use approvals, accounting and depreciation ledger account, and similar information).

d. Inventory of Existing Development for Retrofitting Opportunities

- i. Each Permittee shall develop an inventory of retrofitting opportunities that meets the requirements of this Part VI. ~~89.Dd~~. Retrofit opportunities shall be identified within the public right-of-way or in coordination with a TMDL implementation plan(s). The goals of the existing development retrofitting inventory are to address the impacts of existing development through regional or sub-regional retrofit projects that reduce the discharges of storm water pollutants into the MS4 and prevent discharges from the MS4 from causing or contributing to a violation of water quality standards as defined in Part V.A, Receiving Water Limitations.
- ii. Each Permittee shall screen existing areas of development to identify candidate areas for retrofitting using watershed models or other screening level tools.
- iii. Each Permittee shall evaluate and rank the areas of existing development identified in the screening to prioritize retrofitting candidates. Criteria for evaluation may include but are not limited to:
 - (1) Feasibility, including general private and public land availability;
 - (2) Cost effectiveness;

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- (3) Pollutant removal effectiveness;
- (4) Tributary area potentially treated;
- (5) Maintenance requirements;
- (6) Landowner cooperation;
- (7) Neighborhood acceptance;
- (8) Aesthetic qualities;
- (9) Efficacy at addressing concern; and
- (10) Potential improvements to public health and safety.

iv. Each Permittee shall consider the results of the evaluation in the following programs:

- (1) The Permittee’s storm water management program: Highly feasible projects expected to benefit water quality should be given a high priority to implement source control and treatment control BMPs in a Permittee’s SQMP.
- (2) Off-site mitigation for New Development and Redevelopment: Each Permittee shall consider high priority retrofit projects as candidates for off-site mitigation projects per Part VI.D.67.c.iii.(4).(d).
- (3) Where feasible, at the discretion of the Permittee, the existing development retrofitting program may be coordinated with flood control projects and other infrastructure improvement programs per Part VI.D.89.e.ii.(2) below.

v. Each Permittee shall cooperate with private landowners to encourage site specific retrofitting projects. Each Permittee shall consider the following practices in cooperating with private landowners to retrofit existing development:

- (1) Demonstration retrofit projects;
- (2) Retrofits on public land and easements that treat runoff from private developments;
- (3) Education and outreach;
- (4) Subsidies for retrofit projects;
- (5) Requiring retrofit projects as enforcement, mitigation or ordinance compliance;
- (6) Public and private partnerships;
- (7) Fees for existing discharges to the MS4 and reduction of fees for retrofit implementation.

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e. Public Agency Facility and Activity Management

- i. Each Permittee shall obtain separate coverage under the Industrial General Permit for all Permittee-owned or operated facilities where industrial activities are conducted that require coverage under the Industrial General Permit.
- ii. Each Permittee shall implement the following measures for Permittee- owned and operated flood management projects:
 - (1) Develop procedures to assess the impacts of flood management projects on the water quality of receiving water bodies; and
 - (2) Evaluate existing structural flood control facilities to determine if retrofitting the facility to provide additional pollutant removal from storm water is feasible.
- iii. Each Permittee shall ensure the implementation and maintenance of activity specific BMPs listed in Table 18 (BMPs for Public Agency Facilities and Activities) when such activities occur at Permittee-owned or operated facilities and field activities (e.g., project sites) including but not limited to the facility types listed in Part VI.D.89.c above, and at any area that includes the activities described in Table 18, or that have the potential to discharge pollutants in storm water.
- iv. Any contractors hired by the Permittee to conduct Public Agency Activities including, but not limited to, storm and/or sanitary sewer system inspection and repair, street sweeping, trash pick-up and disposal, and street and right-of-way construction and repair shall be contractually required to implement and maintain the activity specific BMPs listed in Table 18. Each Permittee shall conduct oversight of contractor activities to ensure these BMPs are implemented and maintained.
- v. Permittee-owned or operated facilities that have obtained coverage under the Industrial General Permit shall implement and maintain BMPs consistent with the associated SWPPP and are therefore not required to implement and maintain the activity specific BMPs listed in Table 18.
- vi. Effective source control BMPs for the activities listed in Table 18 shall be implemented at Permittee-owned or operated facilities, unless the pollutant generating activity does not occur. Each Permittee shall require implementation of additional BMPs where storm water from the MS4 discharges to a significant ecological area (SEA, see Attachment A for definition), a water body subject to TMDL provisions in Part ~~7~~VI.E., or a CWA § 303(d) listed water body (see Part VI.E below). Likewise, for those BMPs that are not adequately protective of water quality standards, a Permittee may require additional site-specific controls.

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Table 18. BMPs for Public Agency Facilities and Activities

General and Activity Specific BMPs	
General BMPs	Scheduling and Planning
	Spill Prevention and Control
	Sanitary/Septic Waste Management
	Material Use
	Safer Alternative Products
	Vehicle/Equipment Cleaning, Fueling and Maintenance
	Illicit Connection Detection, Reporting and Removal
	Illegal Spill Discharge Control
	Maintenance Facility Housekeeping Practices
Flexible Pavement	Asphalt Cement Crack and Joint Grinding/ Sealing
	Asphalt Paving
	Structural Pavement Failure (Digouts) Pavement Grinding and Paving
	Emergency Pothole Repairs
	Sealing Operations
Rigid Pavement	Portland Cement Crack and Joint Sealing
	Mudjacking and Drilling
	Concrete Slab and Spall Repair
Slope/ Vegetation	Shoulder Grading
	Nonlandscaped Chemical Vegetation Control
	Nonlandscaped Mechanical Vegetation Control/ Mowing
	Nonlandscaped Tree and Shrub Pruning, Brush Chipping, Tree and Shrub Removal
	Fence Repair
	Drainage Ditch and Channel Maintenance
	Drain and Culvert Maintenance
	Curb and Sidewalk Repair
Litter/ Debris/ Graffiti	Sweeping Operations
	Litter and Debris Removal
	Emergency Response and Cleanup Practices
	Graffiti Removal
Landscaping	Chemical Vegetation Control
	Manual Vegetation Control
	Landscaped Mechanical Vegetation Control/ Mowing
	Landscaped Tree and Shrub Pruning, Brush Chipping, Tree and Shrub Removal
	Irrigation Line Repairs
	Irrigation (Watering), Potable and Nonpotable
Environmental	Storm Drain Stenciling
	Roadside Slope Inspection

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General and Activity Specific BMPs	
	Roadside Stabilization
	Stormwater Treatment Devices
	Traction Sand Trap Devices
Bridges	Welding and Grinding
	Sandblasting, Wet Blast with Sand Injection and Hydroblasting
	Painting
	Bridge Repairs
Other Structures	Pump Station Cleaning
	Tube and Tunnel Maintenance and Repair
	Tow Truck Operations
	Toll Booth Lane Scrubbing Operations
Electrical	Sawcutting for Loop Installation
Traffic Guidance	Thermoplastic Striping and Marking
	Paint Striping and Marking
	Raised/ Recessed Pavement Marker Application and Removal
	Sign Repair and Maintenance
	Median Barrier and Guard Rail Repair
	Emergency Vehicle Energy Attenuation Repair
Storm Maintenance	Minor Slides and Slipouts Cleanup/ Repair
Management Support and	Building and Grounds Maintenance
	Storage of Hazardous Materials (Working Stock)
	Material Storage Control (Hazardous Waste)
	Outdoor Storage of Raw Materials
	Vehicle and Equipment Fueling
	Vehicle and Equipment Cleaning
	Vehicle and Equipment Maintenance and Repair
	Aboveground and Underground Tank Leak and Spill Control

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f. Vehicle and Equipment Washing

- i. Each Permittee shall implement and maintain the activity specific BMPs listed in Table 18 (BMPs for Public Agency Facilities and Activities) for all fixed vehicle and equipment washing; including fire fighting and emergency response vehicles.
- ii. Each Permittee shall prevent discharges of wash waters from vehicle and equipment washing to the MS4 by implementing any of the following measures at existing facilities with vehicle or equipment wash areas:
 - (1) Self-contain, and haul off for disposal; or

(2) Equip with a clarifier or an alternative pre-treatment device and plumb to the sanitary sewer in accordance with applicable waste water provider regulations.

iii. Each Permittee shall ensure that any municipal facilities constructed, redeveloped, or replaced shall not discharge wastewater from vehicle and equipment wash areas to the MS4 by plumbing all areas to the sanitary sewer in accordance with applicable waste water provider regulations, or self-containing all waste water/ wash water and hauling to a point of legal disposal.

g. Landscape, Park, and Recreational Facilities Management

i. Each Permittee shall implement and maintain the activity specific BMPs listed in Table 18 for all public right-of-ways, flood control facilities and open channels, lakes and reservoirs, and landscape, park, and recreational facilities and activities.

ii. ~~Integrated Pest Management (IPM) is an ecosystem based strategy that focuses on long term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties.~~ Each Permittee shall implement an IPM program that includes the following:

- (1) Pesticides are used only if monitoring indicates they are needed, and pesticides are applied according to applicable permits and established guidelines.
- (2) Treatments are made with the goal of removing only the target organism.
- (3) Pest controls are selected and applied in a manner that minimizes risks to human health, beneficial non-target organisms, and the environment.
- (4) The use of pesticides, including Organophosphates and Pyrethroids, does not threaten water quality.
- (5) Partner with other agencies and organizations to encourage the use of IPM.
- (6) Adopt and verifiably implement policies, procedures, and/ or ordinances requiring the minimization of pesticide use and encouraging the use of IPM techniques (including beneficial insects) for Public Agency Facilities and Activities.
- (7) Policies, procedures, and ordinances shall include commitments and a schedule to reduce the use of pesticides that cause impairment of surface waters by implementing the following procedures:
 - (a) Prepare and annually update an inventory of pesticides used by all internal departments, divisions, and other operational units.
 - (b) Quantify pesticide use by staff and hired contractors.

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(c) Demonstrate implementation of IPM alternatives where feasible to reduce pesticide use.

iii. Each Permittee shall implement the following requirements:

- (1) Use a standardized protocol for the routine and non-routine application of pesticides (including pre-emergents), and fertilizers.
- (2) Ensure there is no application of pesticides or fertilizers (1) when two or more consecutive days with greater than 50% chance of rainfall are predicted by NOAA³⁶, (2) within 48 hours of a ½-inch rain event, or (3) when water is flowing off the area where the application is to occur. This requirement does not apply to the application of aquatic pesticides described in Part VI.D.89.g.iii.(1) above or pesticides which require water for activation.
- (3) Ensure that no banned or unregistered pesticides are stored or applied.
- (4) Ensure that all staff applying pesticides are certified in the appropriate category by the California Department of Pesticide Regulation, or are under the direct supervision of a pesticide applicator certified in the appropriate category.
- (5) Implement procedures to encourage the retention and planting of native vegetation to reduce water, pesticide and fertilizer needs; and
- (6) Store pesticides and fertilizers indoors or under cover on paved surfaces, or use secondary containment.
 - (a) Reduce the use, storage, and handling of hazardous materials to reduce the potential for spills.
 - (b) Regularly inspect storage areas.

h. Storm Drain Operation and Maintenance

- i. Each Permittee shall implement and maintain the activity specific BMPs listed in Table 18 for storm drain operation and maintenance.
- ii. Ensure that all material removed from the MS4 does not reenter the system. Solid material shall be dewatered in a contained area and liquid material shall be disposed in accordance with any of the following measures:
 - (1) Self-contain, and haul off for legal disposal; or
 - ~~(1)~~(2) Applied to the land without runoff; or
 - ~~(2)~~(3) Equip with a clarifier or an alternative pre-treatment device; and plumb to the sanitary sewer in accordance with applicable waste water provider regulations.

iii. Catch Basin Cleaning

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³⁶ www.srh.noaa.gov/forecast

- (1) In areas that are not subject to a trash TMDL, each Permittee shall determine priority areas and shall update its map or list of Catch Basins with their GPS coordinates and priority:

Priority A: Catch basins that are designated as consistently generating the highest volumes of trash and/or debris.

Priority B: Catch basins that are designated as consistently generating moderate volumes of trash and/or debris.

Priority C: Catch basins that are designated as generating low volumes of trash and/or debris.

The map or list shall contain the rationale or data to support priority designations.

- (2) In areas that are not subject to a trash TMDL, each Permittee shall inspect catch basins according to the following schedule:

Priority A: A minimum of 3 times during the wet season (October 1 through April 15) and once during the dry season every year.

Priority B: A minimum of once during the wet season and once during the dry season every year.

Priority C: A minimum of once per year.

Catch basins shall be cleaned as necessary on the basis of inspections. At a minimum, Permittees shall ensure that any catch basin that is determined to be at least 25% full of trash shall be cleaned out. Permittees shall maintain inspection and cleaning records for Regional Water Board review.

- (3) In areas that are subject to a trash TMDL, the subject Permittees shall implement the applicable provisions in Part VI.E.

iv. Trash Management at Public Events

- (1) Each Permittee shall require the following measures for any event in the public right of way or wherever it is foreseeable that substantial quantities of trash and litter may be generated, including events located in areas that are subject to a trash TMDL:

(a) Proper management of trash and litter generated; and

(b) Arrangement for temporary screens to be placed on catch basins; or

(c) Provide clean out of catch basins, trash receptacles, and grounds in the event area within ~~24 hours~~ one business day subsequent to the event.

v. Trash Receptacles

- (1) Each Permittee shall ensure trash receptacles, or equivalent trash capturing devices, are covered in areas newly identified as high trash generation areas within its jurisdiction.

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- (2) Each Permittee shall ensure that all trash receptacles are cleaned out and maintained as necessary to prevent trash overflow.

vi. Catch Basin Labels and Open Channel Signage

- (1) Each Permittee shall label all storm drain inlets that they own with a legible “no dumping” message.
- (2) Each Permittee shall inspect the legibility of the stencil or label nearest each inlet prior to the wet season every year.
- (3) Each Permittee shall record all catch basins with illegible stencils and re-stencil or re-label within 180 days of inspection.
- (4) Each Permittee shall post signs, referencing local code(s) that prohibit littering and illegal dumping, at designated public access points to open channels, creeks, urban lakes, and other relevant water bodies.

vii. Additional Trash Management Practices

- (1) In areas that are not subject to a trash TMDL, each Permittee shall install trash excluders, or equivalent devices, on or in catch basins or outfalls to prevent the discharge of trash to the MS4 or receiving water no later than ~~two~~ four years after the effective date of this Order in areas defined as Priority A (Part VI.D.89.h.iii.(1)) except at sites where the application of such BMP(s) alone will cause flooding. Lack of maintenance that causes flooding is not an acceptable exception to the requirement to install BMPs. Alternatively, each Permittee may implement alternative or enhanced BMPs beyond the provisions of this Order (such as but not limited to increased street sweeping, adding trash cans near trash generation sites, prompt enforcement of trash accumulation, increased trash collection on public property, increased litter prevention messages or trash nets within the MS4) that provide substantially equivalent removal of trash. Each Permittee shall demonstrate that BMPs, which substituted for trash excluders, provide equivalent trash removal performance as excluders. When outfall trash capture is provided, revision of the schedule for inspection and cleanout of catch basins in Part VI.D.89.h.iii.(2) shall be reported in the next year’s annual report.

viii. Storm Drain Maintenance

Each Permittee shall implement a program for Storm Drain Maintenance that includes the following:

- (1) Visual monitoring of Permittee-owned open channels and other drainage structures, ~~including debris basins,~~ for trash and debris at least annually.
- (2) Removal of trash and debris from open channels ~~and debris basins~~ a minimum of once per year before the wet season.
- (3) Elimination of the discharge of contaminants during MS4 maintenance and clean outs.

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- (4) Proper disposal of debris and trash removed during storm drain maintenance.

ix. Infiltration from Sanitary Sewer to MS4/Preventive Maintenance

- (1) Each Permittee shall implement controls and measures to prevent and eliminate infiltration of seepage from sanitary sewers to MS4s through thorough, routine preventive maintenance of the MS4.
- (2) Each Permittee that operates both a municipal sanitary sewer system and a MS4 must implement controls and measures to prevent and eliminate infiltration of seepage from the sanitary sewers to the MS4s that must include overall sanitary sewer and MS4 surveys and thorough, routine preventive maintenance of both. Implementation of a Sewer System Management Plan in accordance with the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, may be used to fulfill this requirement.
- (3) Each Permittee shall implement controls to limit infiltration of seepage from sanitary sewers to the MS4 where necessary. Such controls must include:
 - (a) Adequate plan checking for construction and new development;
 - (b) Incident response training for its municipal employees that identify sanitary sewer spills;
 - (c) Code enforcement inspections;
 - (d) MS4 maintenance and inspections;
 - (e) Interagency coordination with sewer agencies; and
 - (f) Proper education of its municipal staff and contractors conducting field operations on the MS4 or its municipal sanitary sewer (if applicable).

x. Permittee Owned Treatment Control BMPs

- (1) Each Permittee shall implement an inspection and maintenance program for all Permittee owned treatment control BMPs, including post-construction treatment control BMPs.
- (2) Each Permittee shall ensure proper operation of all treatment control BMPs and maintain them as necessary for proper operation, including all post-construction treatment control BMPs.
- (3) Any residual water³⁷ produced by a treatment control BMP and not being internal to the BMP performance when being maintained shall be:
 - (a) Hauled away and legally disposed of; or
 - (b) Applied to the land without runoff; or
 - (c) Discharged to the sanitary sewer system (with permits or authorization); or

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³⁷ To be defined in Definitions (see Attachment A).

(d) Treated or filtered to remove bacteria, sediments, nutrients, and meet the limitations set in Table 19 (Discharge Limitations for Dewatering Treatment BMPs), prior to discharge to the MS4.

Table 19. Discharge Limitations for Dewatering Treatment BMPs³⁸

Parameter	Units	Limitation
Total Suspended Solids	mg/L	100
Turbidity	NTU	50
Oil and Grease	mg/L	10

i. Streets, Roads, and Parking Facilities Maintenance

i. Each Permittee shall designate streets and/or street segments within its jurisdiction as one of the following:

Priority A: Streets and/or street segments that are designated as consistently generating the highest volumes of trash and/or debris.

Priority B: Streets and/or street segments that are designated as consistently generating moderate volumes of trash and/or debris.

Priority C: Streets and/or street segments that are designated as generating low volumes of trash and/or debris.

ii. Each Permittee shall perform street sweeping of curbed streets according to the following schedule:

Priority A: Streets and/or street segments that are designated as Priority A shall be swept at least two times per month.

Priority B: Streets and/or street segments that are designated as Priority B shall be swept at least once per month.

Priority C: Streets and/or street segments that are designated as Priority C shall be swept as necessary but in no case less than once per year.

iii. Road Reconstruction

Each Permittee shall require that for any project that includes roadbed or street paving, repaving, patching, digouts, or resurfacing roadbed surfaces, that the following BMPs be implemented for each project.

(1) Restrict paving and repaving activity to exclude periods of rainfall or predicted rainfall³⁹ unless required by emergency conditions.

(2) Install sand bags or gravel bags and filter fabric at all susceptible storm drain inlets and at manholes to prevent spills of paving products and tack coat;

³⁸ Technology based effluent limits/limitations.

³⁹ A probability of precipitation (POP) of 50% is required.

- (3) Prevent the discharge of release agents including soybean oil, other oils, or diesel into the MS4 or receiving waters.
- (4) Prevent non-storm water runoff from water use for the roller and for evaporative cooling of the asphalt.
- (5) Clean equipment over absorbent pads, drip pans, plastic sheeting or other material to capture all spillage and dispose of properly.
- (6) Collect liquid waste in a container, with a secure lid, for transport to a maintenance facility to be reused, recycled or disposed of properly.
- (7) Collect solid waste by vacuuming or sweeping and securing in an appropriate container for transport to a maintenance facility to be reused, recycled or disposed of properly.
- (8) Cover the “cold-mix” asphalt (i.e., pre-mixed aggregate and asphalt binder) with protective sheeting during a rainstorm.
- (9) Cover loads with tarp before haul-off to a storage site, and do not overload trucks.
- (10) Minimize airborne dust by using water spray during grinding.
- (11) Avoid stockpiling soil, sand, sediment, asphalt material and asphalt grindings materials or rubble in or near MS4 or receiving waters.
- (12) Protect stockpiles with a cover or sediment barriers during a rain.

iv. Parking Facilities Maintenance

- (1) Permittee-owned parking lots exposed to storm water shall be kept clear of debris and excessive oil buildup and cleaned ~~using street sweeping equipment~~ no less than 2 times per month and/or inspected no less than 2 times per month to determine if cleaning is necessary. In no case shall a Permittee-owned parking lot be cleaned less than once a month.

j. Emergency Procedures

- i. Each Permittee may conduct repairs of essential public service systems and infrastructure in emergency situations with a self-waiver of the provisions of this Order as follows:
 - (1) The Permittee shall abide by all other regulatory requirements, including notification to other agencies as appropriate.
 - (2) Where the self-waiver has been invoked, the Permittee shall submit to the Regional Water Board Executive Officer a statement of the occurrence of the emergency, an explanation of the circumstances, and the measures that were implemented to reduce the threat to water quality, no later than 30 business days after the situation of emergency has passed.
 - (3) Minor repairs of essential public service systems and infrastructure in emergency situations (that can be completed in less than ~~one~~ three days)

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are not subject to the notification provisions. Appropriate BMPs to reduce the threat to water quality shall be implemented.

k. Municipal Employee and Contractor Training

i. Each Permittee shall, no later than 1 year after Order adoption and annually thereafter before June 30, train all of their employees ~~and contractors~~ in targeted positions (whose interactions, jobs, and activities affect storm water quality) on the requirements of the overall storm water management program, or shall ensure contractors performing privatized/contracted municipal services are appropriately trained to:

(1) Promote a clear understanding of the potential for activities to pollute storm water.

(2) Identify opportunities to require, implement, and maintain appropriate BMPs in their line of work.

~~(2)~~ Outside contractors can self-certify, providing they certify they have received all applicable training required in the Permit and have documentation to that effect.

ii. Each Permittee shall, no later than 1 year after Order adoption and annually thereafter before June 30, train all of their employees and contractors who use or have the potential to use pesticides or fertilizers (whether or not they normally apply these as part of their work). Training programs shall address:

(1) The potential for pesticide-related surface water toxicity.

(2) Proper use, handling, and disposal of pesticides.

(3) Least toxic methods of pest prevention and control, including IPM.

~~(4)~~ Reduction of pesticide use.

~~(4)~~ iii. Outside contractors can self-certify, providing they certify they have received all applicable training required in the Permit and have documentation to that effect.

9-10. Illicit Connections and Illicit Discharges Elimination Program

a. General

i. Each Permittee shall continue to implement an Illicit Connection and Illicit Discharge Elimination (IC/ID) Program to detect, investigate, and eliminate IC/IDs to the MS4. The IC/ID Program must be implemented in accordance with the requirements and performance measures specified in this Order.

ii. As stated in Part VI.FA.4-2 of this Order, each Permittee must have adequate legal authority to prohibit IC/IDs to the MS4 and enable enforcement capabilities to eliminate the source of IC/IDs.

iii. Each Permittee's IC/ID Program shall consist of at least the following major program components:

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- (1) Procedures for conducting source investigations for IC/IDs
- (2) Procedures for eliminating the source of IC/IDs
- (3) Procedures for public reporting of illicit discharges
- (4) Spill response plan
- (5) IC/IDs education and training for Permittee staff

b. Illicit Discharge Source Investigation and Elimination

- i. Each Permittee shall develop written procedures for conducting investigations to identify the source of all suspected illicit discharges, including procedures to eliminate the discharge once the source is located.
- ii. At a minimum, each Permittee shall initiate an investigation(s) to identify and locate the source within 72 hours of becoming aware of the illicit discharge.
- iii. When conducting investigations, each Permittee shall comply with the following:
 - (1) Illicit discharges suspected of being sanitary sewage and/or significantly contaminated shall be investigated first.
 - (2) Each Permittee shall track all investigations to document at a minimum the date(s) the illicit discharge was observed; the results of the investigation; any follow-up of the investigation; and the date the investigation was closed.
 - (3) Each Permittee shall investigate the source of all observed illicit discharges.
- iv. When taking corrective action to eliminate illicit discharges, each Permittee shall comply with the following:
 - (1) If the source of the illicit discharge has been determined to originate within the Permittee's jurisdiction, the Permittee shall immediately notify the responsible party/parties of the problem, and require the responsible party to initiate all necessary corrective actions to eliminate the illicit discharge. Upon being notified that the discharge has been eliminated, the Permittee shall conduct a follow-up investigation to verify that the discharge has been eliminated and cleaned-up to the satisfaction of the Permittee(s). Each Permittee shall document its follow-up investigation. Each Permittee may seek recovery and remediation costs from responsible parties or require compensation for the cost of all inspection, investigation, cleanup and oversight activities. Resulting enforcement actions shall follow the program's Progressive Enforcement Policy, per Part VI.D.2.
 - (2) If the source of the illicit discharge has been determined to originate within an upstream jurisdiction, the Permittee shall notify the upstream jurisdiction and the Regional Water Board within 30 days of such determination and provide all of the information collected regarding efforts to identify its source. Each Permittee may seek recovery and remediation

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costs from responsible parties or require compensation for the cost of all inspection, investigation, cleanup and oversight activities. Resulting enforcement actions shall follow the program's Progressive Enforcement Policy, per Part VI.D.2.

(3) If the source of the illicit discharge cannot be traced to a suspected responsible party, affected Permittees shall implement its spill response plan and then initiate a permanent solution as described in section 910.b.v below.

- v. In the event the Permittee is unable to eliminate an ongoing illicit discharge following full execution of its legal authority and in accordance with its Progressive Enforcement Policy, or other circumstances prevent the full elimination of an ongoing illicit discharge, including the inability to find the responsible party/parties, the Permittee shall provide for diversion of the entire flow to the sanitary sewer or provide treatment. In either instance, the Permittee shall notify the Regional Water Board in writing within 30 days of such determination and shall provide a written plan for review and comment that describes the efforts that have been undertaken to eliminate the illicit discharge, a description of the actions to be undertaken, anticipated costs, and a schedule for completion.

c. Identification and Response to Illicit Connections

~~i. Systematic Visual Inspections for Illicit Connections~~

~~The LACFGD shall continue the systematic field visual inspections of its MS4 for illicit connections in accordance with the following schedule:~~

- ~~(1) Open channels: No later than one year after the effective date of this Order, and annually thereafter.~~
- ~~(2) Underground storm drains identified by the LACFGD as high priority: No later than three years after the effective date of this Order.~~
- ~~(3) Underground storm drains with a diameter of 36 inches or greater: No later than by the Order expiration date.~~

~~ii.i. Investigation~~

~~Each Permittee, upon discovery or upon receiving a report of a suspected illicit connection, shall initiate an investigation within 21 days, to determine the following: (1) source of the connection, (2) nature and volume of discharge through the connection, and (3) responsible party for the connection.~~

~~ii.ii. Elimination~~

~~Each Permittee, upon confirmation of an illicit MS4 connection, shall ensure that the connection is:~~

- ~~(1) Permitted or documented, provided the connection will only discharge storm water and non-storm water allowed under this Order or other individual or general NPDES Permits/WDRs, or~~

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- (2) Eliminated within 180 days of completion of the investigation, using its formal enforcement authority, if necessary, to eliminate the illicit connection.

iv.iii. Documentation

Formal records must be maintained for all illicit connection investigations and the formal enforcement taken to eliminate illicit connections.

d. Public Reporting of Non-Storm Water Discharges and Spills

- i. Each Permittee shall promote, publicize, and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into or from MS4s through a central contact point, including phone numbers and an internet site for complaints and spill reporting. Each Permittee shall also provide the reporting hotline to Permittee staff to leverage the field staff that has direct contact with the MS4 in detecting and eliminating illicit discharges.
- ii. Each Permittee shall implement the central point of contact and reporting hotline requirements listed in this part in one or more of the following methods:
 - (1) By participating in a County-wide sponsored hotline
 - (2) By participating in one or more Watershed Group sponsored hotlines
 - (3) Or individually within its own jurisdiction
 - (4) The LACFCD shall, in collaboration with the County, continue to maintain the 888-CLEAN-LA hotline and internet site to promote, publicize, and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into or from MS4s.
- iii. Each Permittee shall ensure that signage adjacent to open channels, as required in Part F.8.h.vi, include information regarding dumping prohibitions and public reporting of illicit discharges.
- iv. Each Permittee shall develop and maintain written procedures that document how complaint calls are received, documented, and tracked to ensure that all complaints are adequately addressed. The procedures shall be evaluated to determine whether changes or updates are needed to ensure that the procedures accurately document the methods employed by the Permittee. Any identified changes shall be made to the procedures subsequent to the evaluation.
- v. Each Permittee shall maintain documentation of the complaint calls and record the location of the reported spill or IC/ ID and the actions undertaken in response to all IC/ID complaints, including referrals to other agencies.

e. Spill Response Plan

- i. Each Permittee shall implement a spill response plan for all sewage and other spills that may discharge into its MS4. The spill response plan shall clearly identify agencies responsible for spill response and cleanup, telephone

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numbers and e-mail address for contacts, and shall contain at a minimum the following requirements:

- (1) Coordination with spill response teams throughout all appropriate departments, programs and agencies so that maximum water quality protection is provided.
- (2) Initiate investigation of all public and employee spill complaints within one business day of receiving the complaint to assess validity.
- (3) Response to spills for containment within 4 hours of becoming aware of the spill, except where such spills occur on private property, in which case the response should be within 2 hours of gaining legal access to the property.
- (4) Spills that may endanger health or the environment shall be reported to appropriate public health agencies and the Office of Emergency Services (OES).

f. Illicit Connection and Illicit Discharge Education and Training

- i. Each Permittee must continue to implement a training program regarding the identification of IC/IDs for all municipal field staff, who, as part of their normal job responsibilities (e.g., street sweeping, storm drain maintenance, collection system maintenance, road maintenance), may come into contact with or otherwise observe an illicit discharge or illicit connection to the MS4. Contact information, including the procedure for reporting an illicit discharge, must be readily available to field staff. Training program documents must be available for review by the permitting authority.

ii. Each Permittee shall ensure contractors performing privatized/contracted municipal services such as, but not limited to, storm and/or sanitary sewer system inspection and repair, street sweeping, trash pick-up and disposal, and street and right-of-way construction and repair are trained regarding IC/ID identification and reporting. Permittees may provide training or include contractual requirements for IC/ID identification and reporting training. Outside contractors can self-certify, providing they certify they have received all applicable training required in the Permit and have documentation to that effect.~~Each Permittee shall ensure contractors performing privatized/contracted municipal services such as, but not limited to, storm and/or sanitary sewer system inspection and repair, street sweeping, trash pick-up and disposal, and street and right-of-way construction and repair are trained regarding IC/ID identification and reporting. Permittees may provide training or include contractual requirements for IC/ID identification and reporting training.~~

- iii. Each Permittee's training program should address, at a minimum, the following:
 - (1) IC/ID identification, including definitions and examples,
 - (2) investigation,

- (3) elimination,
- (4) cleanup,
- (5) reporting, and
- (6) documentation.

- iv. Each Permittee must create a list of applicable positions and contractors which require IC/ID training and ensure that training is provided at least twice during the term of the Order. Each Permittee must maintain documentation of the training activities.
- v. New Permittee staff members must be provided with IC/ID training within 180 days of starting employment.

~~D.E. Special Provisions: Total Maximum Daily Load Provisions~~

- 1. The provisions of this Part VI.E. implement and are consistent with the assumptions and requirements of all waste load allocations (WLAs) established in TMDLs for which some or all of the Permittees in this Order are responsible.
 - a. Part VI.E of this Order includes provisions that are designed to assure that Permittees achieve WLAs and meet other requirements of TMDLs covering receiving waters impacted by the Permittees' MS4 discharges. TMDL provisions are grouped by WMA (WMA) in Attachments L through R.
 - b. The Permittees subject to each TMDL are identified in Attachment K.
 - c. The Permittees shall comply with the applicable water quality-based effluent limitations and/or receiving water limitations contained in Attachments L through R, consistent with the assumptions and requirements of the WLAs established in the TMDLs, including implementation plans and schedules, where provided for in the State adoption and approval of the TMDL (40 CFR §122.44(d)(1)(vii)(B); Cal. Wat. Code §13263(a)).
 - d. A Permittee may comply with water quality-based effluent limitations and/or receiving water limitations in Attachments L through R using any lawful means.

2. Compliance Determination

a. General

- i. A Permittee shall demonstrate compliance at compliance monitoring points established in each TMDL or, if not specified in the TMDL, at locations identified in an approved TMDL monitoring plan or in accordance with an approved integrated monitoring program per Attachment E, Part VI.C.5 (Integrated Watershed Monitoring and Assessment).
- ii. Compliance with water quality-based effluent limitations shall be determined as described in Parts VI.E.2.d and VI.E.2.e, or for trash water quality-based

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effluent limitations as described in Part VI.E.5.b, or as otherwise set forth in TMDL specific provisions in Attachments L through R.

- iii. Pursuant to Part VI.C, a Permittee may, individually or as part of a watershed-based group, develop and submit for approval by the Regional Water Board Executive Officer a Watershed Management Program that addresses all water quality-based effluent limitations and receiving water limitations to which the Permittee is subject pursuant to established TMDLs.

b. Commingled Discharges

- i. A number of the TMDLs establish WLAs that are assigned jointly to a group of Permittees whose storm water and/or non-storm water discharges are or may be commingled in the MS4 prior to discharge to the receiving water subject to the TMDL.
- ii. In these cases, pursuant to 40 CFR section 122.26(a)(3)(vi), each Permittee is only responsible for discharges from the MS4 for which they are owners and/or operators.
- iii. Where Permittees have commingled discharges to the receiving water, compliance at the outfall to the receiving water or in the receiving water shall be determined for the group of Permittees as a whole unless an individual Permittee demonstrates that its discharge did not cause or contribute to the exceedance, pursuant to subpart v. below.
- iv. For purposes of compliance determination, each Permittee is responsible for demonstrating that its discharge did not cause or contribute to an exceedance of an applicable water quality-based effluent limitation(s) at the outfall or receiving water limitation(s) in the target receiving water.
- v. A Permittee may demonstrate that its discharge did not cause or contribute to an exceedance of an applicable water quality-based effluent limitation or receiving water limitation in any of the following ways:
 - (1) Demonstrate that there is no discharge from the Permittee's MS4 into the applicable receiving water; or
 - (2) Demonstrate that the discharge from the Permittee's MS4 is treated controlled to a level that does not exceed the applicable water quality-based effluent limitation; or
 - (3) For exceedances of bacteria receiving water limitations or water quality-based effluent limitations, demonstrate through a source investigation pursuant to protocols established under California Water Code section 13178 or for exceedances of other receiving water limitations or water quality-based effluent limitations, demonstrate using other accepted source identification protocols, that pollutant sources within the jurisdiction

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of the Permittee or the Permittee's MS4 have not caused or contributed to the exceedance of the Receiving Water Limitation(s).

c. Receiving Water Limitations Addressed by a TMDL

- i. For receiving water limitations in Part V.A. associated with water body-pollutant combinations addressed in a TMDL, Permittees shall achieve compliance with the receiving water limitations in Part V.A. as outlined in this Part VI.E. and Attachments L through R of this Order.
- ii. A Permittee shall not be considered in violation of Part V.A. of this Order for the specific pollutant addressed in the TMDL, if it is in compliance with the applicable TMDL requirement(s), including compliance schedules, of this Part VI.E. and Attachments L through R.
- iii. As long as a Permittee is in compliance with the applicable TMDL requirements in a time schedule order (TSO) issued by the Regional Water Board pursuant to California Water Code sections 13300 and 13385(j)(3), it is not the Regional Water Board's intention to take an enforcement action for violations of Part V.A. of this Order for the specific pollutant(s) addressed in the TSO.

d. Interim Water Quality-Based Effluent Limitations and Receiving Water Limitations

- i. A Permittee shall be considered in compliance with an applicable interim water quality-based effluent limitation and/or interim receiving water limitation for ~~the a~~ pollutant(s) associated with a specific TMDL if any of the following is demonstrated:
 - (1) There are no violations of the interim water quality-based effluent limitation for the pollutant(s) associated with a specific TMDL at the Permittee's applicable MS4 outfall(s),⁴⁰ including an outfall to the receiving water that collects discharges from multiple Permittees' jurisdictions;
 - (2) There are no exceedances of the applicable receiving water limitation for the pollutant(s) associated with a specific TMDL in the receiving water(s) at, or downstream of, the Permittee's outfall(s);
 - (3) There is no direct or indirect discharge from the Permittee's MS4 to the receiving water during the time period subject to the water quality-based effluent limitation and/or receiving water limitation for the pollutant(s) associated with a specific TMDL; or
 - (4) The Permittee has submitted and is fully implementing an approved Watershed Management Program pursuant to Part VI.C that provides

⁴⁰ An outfall may include a manhole or other point of access to the MS4 at the Permittee's jurisdictional boundary.

reasonable assurance that interim water quality-based effluent limitations will be achieved per applicable compliance schedules.

(a) To be considered fully implementing an approved Watershed Management Program, a Permittee must be implementing actions consistent with the approved program and applicable compliance schedules, including structural BMPs.

(b) Structural storm water BMPs ~~must~~ should be designed and maintained to treat storm water runoff from the 85th percentile, 24-hour storm, where feasible and necessary to achieve applicable WQBELs and receiving water limitations, and maintenance records must be up-to-date and available for inspection by the Regional Water Board.

(c) A Permittee that does not implement the Watershed Management Program in accordance with the milestones and compliance schedules shall demonstrate compliance with its interim water quality-based effluent limitations and/or receiving water limitations pursuant to Part VI.E.2.d.i.(1)-(3), above.

(d) A Permittee shall not be considered in violation of interim WQBELs with compliance deadlines occurring prior to approval of a WMP, if all the following requirements are met:

(1) Provides timely notice of its intent to develop a WMP,

(2) Meets all deadlines for submittal of a WMP,

(3) Implements watershed control measures identified in its notification to achieve interim WQBELs with compliance deadlines occurring prior to approval of a WMP, and

(4) Receives final approval of its WMP.

e. Final Water Quality-based Effluent Limitations and/or Receiving Water Limitations

i. A Permittee shall be deemed in compliance with an applicable final water quality-based effluent limitation and/or final receiving water limitation for the pollutant(s) associated with a specific TMDL if any of the following is demonstrated:

(1) There are no violations of the final water quality-based effluent limitation for the specific pollutant at the Permittee's applicable MS4 outfall(s)⁴¹;

⁴¹ Ibid.

- (2) There are no exceedances of applicable receiving water limitation for the specific pollutant in the receiving water(s) at, or downstream of, the Permittee's outfall(s); or
- (3) There is no direct or indirect discharge from the Permittee's MS4 to the receiving water during the time period subject to the water quality-based effluent limitation and/or receiving water limitation for the pollutant(s) associated with a specific TMDL.

3. USEPA Established TMDLs

TMDLs established by the USEPA, to which Permittees are subject, do not contain an implementation plan adopted pursuant to California Water Code section 13242. However, USEPA has included implementation recommendations as part of these TMDLs. In lieu of inclusion of numeric water quality based effluent limitations at this time, this Order requires Permittees subject to WLAs in USEPA established TMDLs to propose and implement best management practices (BMPs) that will be effective in ultimately achieving the numeric WLAs. The Regional Water Board may, at its discretion, revisit this decision within the term of this Order or in a future permit, as more information is developed to support the inclusion of numeric water quality based effluent limitations.

- a. Each Permittee shall propose BMPs to achieve the WLAs contained in the applicable USEPA established TMDL(s), and a schedule for implementing the BMPs that is as short as possible, in a Watershed Management Program-Plan.
- b. Each Permittee may either individually submit a Watershed Management Program Plan, or may jointly submit a plan with all other Permittees subject to the WLAs contained in the USEPA established TMDL.
- c. At a minimum, each Permittee shall include the following information in its Watershed Management Program Plan, relevant to each applicable USEPA established TMDL:
 - i. Available data demonstrating the current quality of the Permittee's MS4 discharge(s) in terms of concentration and/or load of the target pollutant(s) to the receiving waters subject to the TMDL;
 - ii. A detailed description of BMPs that have been implemented, and/or are currently being implemented by the Permittee to achieve the WLA(s), if any;
 - iii. A detailed time schedule of specific actions the Permittee will take in order to achieve the applicable WLA(s);
 - iv. A demonstration that the time schedule requested is as short as possible, taking into account the time since USEPA establishment of the TMDL, and technological, operation, and economic factors that affect the design,

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development, and implementation of the control measures that are necessary to comply with the WLA(s);

(1) For the Malibu Creek Nutrient TMDL established by USEPA in 2003, in no case shall the time schedule to achieve the final numeric WLAs exceed five years from the effective date of this Order; and

- v. If the requested time schedule exceeds one year, the proposed schedule shall include interim requirements and numeric milestones and the date(s) for their achievement.
- d. Each Permittee subject to a WLA in a TMDL established by USEPA since January 1, 2010 shall submit a draft of a Watershed Management Program Plan to the Regional Water Board Executive Officer for approval no later than one year after the effective date of this Order.
- e. Each Permittee subject to a WLA in a TMDL established by USEPA prior to January 1, 2010 shall submit a draft of a Watershed Management Program Plan to the Regional Water Board Executive Officer for approval no later than six months after the effective date of this Order.
- f. If a Permittee does not submit a Watershed Management Program Plan, or the plan is determined to be inadequate by the Regional Water Board Executive Officer and the Permittee does not make the necessary revisions within 90 days of written notification that plan is inadequate, the Permittee shall be required to demonstrate compliance with the numeric WLAs immediately based on monitoring data collected under the MRP (Attachment E) for this Order.

4. State Adopted TMDLs where Final Compliance Deadlines have Passed

- a. Permittees shall comply immediately with water quality-based effluent limitations and/or receiving water limitations to implement WLAs in state-adopted TMDLs for which final compliance deadlines have passed pursuant to the TMDL implementation schedule.
- b. Where a Permittee believes that additional time to comply with the final water quality-based effluent limitations and/or receiving water limitations is necessary, a Permittee may within 45 days of Order adoption request a time schedule order pursuant to California Water Code section 13300 for the Regional Water Board's consideration.
- c. Permittees may either individually request a TSO, or may jointly request a TSO with all Permittees subject to the water quality-based effluent limitations and/or receiving water limitations, to implement the WLAs in the state-adopted TMDL.
- d. At a minimum, a request for a time schedule order shall include the following:

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- i. Data demonstrating the current quality of the MS4 discharge(s) in terms of concentration and/or load of the target pollutant(s) to the receiving waters subject to the TMDL;
- ii. A detailed description and chronology of structural controls and source control efforts, since the effective date of the TMDL, to reduce the pollutant load in the MS4 discharges to the receiving waters subject to the TMDL;
- iii. Justification of the need for additional time to achieve the water quality-based effluent limitations and/or receiving water limitations;
- iv. A detailed time schedule of specific actions the Permittee will take in order to achieve the water quality-based effluent limitations and/or receiving water limitations;
- v. A demonstration that the time schedule requested is as short as possible, taking into account the technological, operation, and economic factors that affect the design, development, and implementation of the control measures that are necessary to comply with the effluent limitation(s); and
- vi. If the requested time schedule exceeds one year, the proposed schedule shall include interim requirements and the date(s) for their achievement. The interim requirements shall include both of the following:
 - (1) Effluent limitation(s) for the pollutant(s) of concern; and
 - (2) Actions and milestones leading to compliance with the effluent limitation(s).

5. Water Quality-Based Effluent Limitations for Trash

Permittees assigned a Waste Load Allocation in a trash TMDL shall comply as set forth below.

- a. **Effluent Limitations:** Permittees shall comply with the interim and final water quality-based effluent limitations for trash set forth in Attachments L through R for the following Trash TMDLs:
 - i. Lake Elizabeth Trash TMDL (Attachment L)
 - ii. Santa Monica Bay Nearshore and Offshore Debris TMDL (Attachment M)
 - iii. Malibu Creek Watershed Trash TMDL (Attachment M)
 - iv. Ballona Creek Trash TMDL (Attachment M)
 - v. Machado Lake Trash TMDL (Attachment N)
 - vi. Los Angeles River Trash TMDL (Attachment O)
 - vii. Peck Road Park Lake Trash TMDL (Attachment O)

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viii. Echo Park Lake Trash TMDL (Attachment O)

ix. Legg Lake Trash TMDL (Attachment PQ)

b. Compliance

- i. Pursuant to California Water Code section 13360(a), Permittees may comply with the trash effluent limitations using any lawful means. Such compliance options are broadly classified as *full capture*, *partial capture*, *institutional controls*, or *minimum frequency of assessment and collection*, as described below, and any combination of these may be employed to achieve compliance:

(1) Full Capture Systems:

- (a) The Basin Plan authorizes the Regional Water Board Executive Officer to certify *full capture systems*, which are systems that meet the operating and performance requirements as described in this Order, and the procedures identified in "Procedures and Requirements for Certification of a Best Management Practice for Trash Control as a Full Capture System."⁴²
- (b) Permittees are authorized to comply with their effluent limitations through certified *full capture systems* provided the requirements of paragraph (c), immediately below, and any conditions in the certification, continue to be met.
- (c) Permittees may comply with their effluent limitations through progressive installation of *full capture systems* throughout their jurisdictional areas until all areas draining to Lake Elizabeth, Santa Monica Bay, Malibu Creek, Ballona Creek, Machado Lake, the Los Angeles River system, Legg Lake, Peck Road Park Lake, and/or Echo Park Lake are addressed. For purposes of this Order, attainment of the effluent limitations shall be conclusively presumed for any drainage area to Lake Elizabeth, Santa Monica Bay, Malibu Creek (and its tributaries), Ballona Creek (and its tributaries), Machado Lake, the Los Angeles River (and its tributaries), Legg Lake, Peck Road Park Lake, and/or Echo Park Lake, ~~and/or Lincoln Park Lake~~ where certified *full capture systems* treat all drainage from the area, provided that the *full capture systems* are adequately sized and maintained, and that maintenance records are up-to-date and available for inspection by the Regional Water Board.

⁴² The Regional Water Board currently recognizes eight *full capture systems*. These are: Vortex Separation Systems (VSS) and seven other Executive Officer certified *full capture systems*, including specific types or designs of trash nets; two gross solids removal devices (GSRDs); catch basin brush inserts and mesh screens; vertical and horizontal trash capture screen inserts; and a connector pipe screen device. See August 3, 2004 Los Angeles Regional Water Quality Control Board Memorandum titled "Procedures and Requirements for Certification of a Best Management Practice for Trash Control as a Full Capture System."

- (i) A Permittee shall be deemed in compliance with its final effluent limitation if it demonstrates that all drainage areas under its jurisdiction and/or authority are serviced by appropriate certified *full capture systems* as described in paragraph (1)(c).
- (ii) A Permittee shall be deemed in compliance with its interim effluent limitations, where applicable:
1. By demonstrating that *full capture systems* treat the percentage of drainage areas in the watershed that corresponds to the required trash abatement.
 2. Alternatively, a Permittee may propose a schedule for installation of *full capture systems* in areas under its jurisdiction and/or authority within a given watershed, targeting first the areas of greatest trash generation, for the Executive Officer's approval. The Executive Officer shall not approve any such schedule that does not result in timely compliance with the final effluent limitations, consistent with the established TMDL implementation schedule and applicable State policies. A Permittee shall be deemed in compliance with its interim effluent limitations provided it is fully in compliance with any such approved schedule.
- (2) Partial Capture Devices and Institutional Controls: Permittees may comply with their interim and final effluent limitations through the installation of *partial capture devices* and the application of *institutional controls*.⁴³
- (a) Trash discharges from areas serviced solely by *partial capture devices* may be estimated based on demonstrated performance of the device(s) in the implementing area.⁴⁴ That is, trash reduction is equivalent to the *partial capture devices'* trash removal efficiency multiplied by the percentage of drainage area serviced by the devices.
- (b) Except as provided in subdivision (c), immediately below, trash discharges from areas addressed by *institutional controls* and/or *partial capture devices* (where site-specific performance data is not available) shall be calculated using a mass balance approach, based on the daily generation rate (DGR) for a representative area.⁴⁵ The DGR shall be determined from direct measurement of trash deposited in the drainage area during any thirty-day period between June 22nd and September 22nd exclusive of rain events⁴⁶, and shall be re-calculated every year thereafter unless a less frequent period for recalculation is approved by the Regional Water Board Executive Officer. The DGR

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⁴³ While interim effluent limitations may be complied with using *partial capture devices*, compliance with final effluent limitations cannot be achieved with the exclusive use of *partial capture devices*.

⁴⁴ Performance shall be demonstrated under different conditions (e.g. low to high trash loading).

⁴⁵ The area(s) should be representative of the land uses and activities within the Permittees' authority and shall be approved by the Executive Officer prior to the 30-day collection period.

⁴⁶ Provided no special events are scheduled that may affect the representative nature of that collection period.

shall be calculated as the total amount of trash collected during this period divided by the length of the collection period.

$$\text{DGR} = (\text{Amount of trash collected during a 30-day collection period})^{47} / (30 \text{ days})$$

The DGR for the applicable area under the Permittees' jurisdiction and/or authority shall be extrapolated from that of the representative drainage area(s). A mass balance equation shall be used to estimate the amount of trash discharged during a storm event.⁴⁸ The *Storm Event Trash Discharge* for a given rain event in the Permittee's drainage area shall be calculated by multiplying the number of days since the last street sweeping by the DGR and subtracting the amount of any trash recovered in the catch basins.⁴⁹ For each day of a storm event that generates precipitation greater than 0.25 inch, the Permittee shall calculate a *Storm Event Trash Discharge*.

$$\text{Storm Event Trash Discharge} = [(\text{Days since last street sweeping} * \text{DGR})] - [\text{Amount of trash recovered from catch basins}]^{50}$$

The sum of the *Storm Event Trash Discharges* for the storm year shall be the Permittee's calculated annual trash discharge.

$$\text{Total Storm Year Trash Discharge} = \sum \text{Storm Event Trash Discharges from Drainage Area}$$

- (c) The Executive Officer may approve alternative compliance monitoring approaches for calculating total storm year trash discharge, upon finding that the program will provide a scientifically-based estimate of the amount of trash discharged from the Permittee's MS4.

(3) Combined Compliance Approaches:

Permittees may comply with their interim and final effluent limitations through a combination of *full capture systems*, *partial capture devices*, and *institutional controls*. Where a Permittee relies on a combination of approaches, it shall demonstrate compliance with the interim and final effluent limitations as specified in (1)(c) in areas where *full capture systems* are installed and as specified in (2)(a) or (2)(b), as appropriate, in areas where *partial capture devices* and *institutional controls* are applied.

(4) Minimum Frequency of Assessment and Collection Approach:

⁴⁷ Between June 22nd and September 22nd

⁴⁸ Amount of trash shall refer to the uncompressed volume (in gallons) or drip-dry weight (in pounds) of trash collected.

⁴⁹ Any negative values shall be considered to represent a zero discharge.

⁵⁰ When more than one storm event occurs prior to the next street sweeping the discharge shall be calculated from the date of the last assessment.

If allowed in a trash TMDL and approved by the Executive Officer, a Permittee may alternatively comply with its final effluent limitations by implementing a program for *minimum frequency of assessment and collection* (MFAC) in conjunction with BMPs. To the satisfaction of the Executive Officer, the MFAC/BMP program must meet the following criteria:

- (a) The MFAC/BMP Program includes an initial minimum frequency of trash assessment and collection and suite of structural and/or nonstructural BMPs. The MFAC/BMP program shall include collection and disposal of all trash found in the receiving water and shoreline. Permittees shall implement an initial suite of BMPs based on current trash management practices in land areas that are found to be sources of trash to the water body. The initial minimum frequency of trash assessment and collection shall be set as specified in the following TMDLs:
 - (i) Malibu Creek Watershed Trash TMDL
 - (ii) Machado Lake Trash TMDL
 - (iii) Legg Lake Trash TMDL
- (b) The MFAC/BMP Program includes reasonable assurances that it will be implemented by the responsible Permittees.
- (c) MFAC protocols may be based on SWAMP protocols for rapid trash assessment, or alternative protocols proposed by Permittees and approved by the Regional Water Board Executive Officer.
- (d) Implementation of the MFAC/BMP program should include a Health and Safety Program to protect personnel. The MFAC/BMP program shall not require Permittees to access and collect trash from areas where personnel are prohibited.
- (e) The Regional Water Board Executive Officer may approve or require a revised assessment and collection frequency and definition of the critical conditions under the MFAC:
 - (i) To prevent trash from accumulating in deleterious amounts that cause nuisance or adversely affect beneficial uses between collections;
 - (ii) To reflect the results of trash assessment and collection;
 - (iii) If the amount of trash collected does not show a decreasing trend, where necessary, such that a shorter interval between collections is warranted; or
 - (iv) If the amount of trash collected is decreasing such that a longer interval between collections is warranted.
- (f) At the end of the implementation period, a revised MFAC/BMP program may be required if the Regional Water Board Executive

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Officer determines that the amount of trash accumulating between collections is causing nuisance or otherwise adversely affecting beneficial uses.

(g) With regard to (4)(e)(i), (4)(e)(ii), or (4)(e)(iii), above, the Regional Water Board Executive Officer is authorized to allow responsible Permittees to implement additional structural or non-structural BMPs in lieu of modifying the monitoring frequency.

ii. If a Permittee is not in compliance with its applicable interim and/or final effluent limitation as identified in Attachments L through R, then it shall be in violation of this Order.

(1) A Permittee relying on *partial capture devices* and/or *institutional controls* that has violated its interim and/or final effluent limitation(s) shall be presumed to have violated the applicable limitation for each day of each storm event that generated precipitation greater than 0.25 inch during the applicable storm year, except those storm days on which it establishes that its cumulative Storm Event Trash Discharges has not exceeded the applicable effluent limitation.

(2) If a Permittee relying on *full capture systems* has failed to demonstrate that the *full capture systems* for any drainage area are adequately sized and maintained, and that maintenance records are up-to-date and available for inspection by the Regional Water Board, and that it is in compliance with any conditions of its certification, shall be presumed to have discharged trash in an amount that corresponds to the percentage of the baseline waste load allocation represented by the drainage area in question.

(a) A Permittee may overcome this presumption by demonstrating (using any of the methods authorized in Part VI.E.5.b) that the actual or calculated discharge for that drainage area is in compliance with the applicable interim or final effluent limitation.

iii. Each Permittee shall be held liable for violations of the effluent limitations assigned to their area. If a Permittee's compliance strategy includes *full* or *partial capture devices* and it chooses to install a full or partial capture device in the MS4 physical infrastructure of another public entity, it is responsible for obtaining all necessary permits to do so. If a Permittee believes it is unable to obtain the permits needed to install a full capture or partial capture device within another Permittee's MS4 physical infrastructure, either Permittee may request the Executive Officer to hold a conference with the Permittees. Nothing in this Order shall affect the right of that public entity or a Permittee to seek indemnity or other recourse from the other as they deem appropriate. Nothing in this subsection shall be construed as relieving a Permittee of any liability that the Permittee would otherwise have under this Order.

c. Monitoring and Reporting Requirements (pursuant to California Water Code section 13383)

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- i. Each Permittee shall submit a TMDL Compliance Report as part of its Annual Report detailing compliance with the applicable interim and/or final effluent limitations. Reporting shall include the information specified below. The report shall be submitted on the reporting form specified by the Regional Water Board Executive Officer. The report shall be signed under penalty of perjury by the Permittee's principal executive officer or ranking elected official or duly authorized representative of the officer, consistent with Part V.B of Attachment D (Standard Provisions), who is responsible for ensuring compliance with this Order. Each Permittee shall be charged with and shall demonstrate compliance with its applicable effluent limitations beginning with its December 15, 2013, ~~October 31, 2012~~ TMDL Compliance Report.

- (1) Reporting Compliance based on Full Capture Systems: Permittees shall provide information on the number and location of full capture installations, the sizing of each full capture installation, the drainage areas addressed by these installations, and compliance with the applicable interim or final effluent limitation, in its TMDL Compliance Report. The Los Angeles Water Board will periodically audit sizing, performance, and other data to validate that a system satisfies the criteria established for a *full capture system* and any conditions established by the Regional Water Board Executive Officer in the certification.
- (2) Reporting Compliance based on Partial Capture Systems and/or Institutional Controls:
- (a) Using Performance Data Specific to the Permittee's Area: In its TMDL Compliance Report, a Permittee shall provide: (i) site-specific performance data for the applicable device(s); (ii) information on the number and location of such installations, and the drainage areas addressed by these installations; and (iii) calculated compliance with the applicable effluent limitations.
- (b) Using Direct Measurement of Trash Discharge: Permittees shall provide an accounting of DGR and trash removal via street sweeping, catch basin clean outs, etc., in a database to facilitate the calculation of discharge for each rain event. The database shall be maintained and provided to the Regional Water Board for inspection upon request. In its TMDL Compliance Report, a Permittee shall provide information on its annual DGR, calculated storm year discharge, and compliance with the applicable effluent limitation.
- (3) Reporting Compliance based on Combined Compliance Approaches:
Permittees shall provide the information specified in Part VI.E.5.c.i(1) for areas where *full capture systems* are installed and that are specified in Part VI.E.5.c.i(2)(a) or (b), as appropriate, for areas where *partial capture devices* and *institutional controls* are applied. In its TMDL Compliance Report, a Permittee shall also provide information on compliance with the applicable effluent limitation based on the combined compliance approaches.

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(4) Reporting Compliance based on an MFAC/BMP Approach:

The MFAC/BMP Program includes a Trash Monitoring and Reporting Plan, and a requirement that the responsible Permittees will self-report any non-compliance with its provisions. The results and report of the Trash Monitoring and Reporting Plan must be submitted to Regional Board with the Permittee’s Annual Report.

- ii. Violation of the reporting requirements of this Part shall be punishable pursuant to, inter alia, California Water Code section 13385, subdivisions (a)(3) and (h)(1), and/or section 13385.1.

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ATTACHMENT A – DEFINITIONS

The following are definitions for terms in this Order:

Adverse Impact

A detrimental effect upon water quality or beneficial uses caused by a discharge or loading of a pollutant or pollutants.

Anti-degradation Policies

Laws, policies and regulations set forth and state and federal statutes and regulations e.g., *Statement of Policy with Respect to Maintaining High Quality Water in California*, State Board Resolution No. 68-16; 40 CFR section 131.12.

Applicable Standards and Limitations

All State, interstate, and federal standards are limitations to which a “discharge” or a related activity is subject under the CWA, including effluent limitations, water quality standards, standards of performance, toxic effluent standards or prohibitions, “best management practices,” and pretreatment standards under sections 301, 302, 303, 304, 306, 307, 308, 403 and 404 of CWA.

Areas of Special Biological Significance (ASBS)

All those areas of this state as ASBS, listed specifically within the California Ocean Plan or so designated by the State Board which, among other areas, includes the area from Mugu Lagoon to Latigo Point: Oceanwater within a line originating from Laguna Point at 34° 5' 40" north, 119° 6'30" west, thence southeasterly following the mean high tideline to a point at Latigo Point defined by the intersection of the mean high tide line and a line extending due south of Benchmark 24; thence due south to a distance of 1000 feet offshore or to the 100 foot isobaths, whichever distance is greater; thence northwesterly following the 100 foot isobaths or maintaining a 1,000-foot distance from shore, whichever maintains the greater distance from shore, to a point lying due south of Laguna Point, thence due north to Laguna Point.

Arithmetic Mean ()

Also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

$$\text{Arithmetic mean} = \frac{\sum x}{n}$$

where:

$\sum x$ is the sum of the measured ambient water concentrations, and n is the number of samples.

Authorized Discharge

Any discharge that is authorized pursuant to an NPDES permit or meets the conditions set forth in this Order.

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Authorized Non-Storm Water Discharge

Authorized non-storm water discharges are discharges that are not composed entirely of storm water and that are either: (1) separately regulated by an individual or general NPDES permit and allowed to discharge to the MS4 when in compliance with all NPDES permit conditions; (2) authorized by USEPA⁵¹ pursuant to sections 104(a) or 104(b) of CERCLA that either (i) will comply with water quality standards as applicable or relevant and appropriate requirements ("ARARs") under section 121(d)(2) of CERCLA or (ii) are subject to (a) a written waiver of ARARs by USEPA pursuant to section 121(d)(4) of CERCLA or (b) a written determination by USEPA that compliance with ARARs is not practicable considering the exigencies of the situation, pursuant to 40 CFR section 300.415(j); or (3) necessary for emergency responses purposes, including flows from emergency fire fighting activities.

Automotive Service Facilities

A facility that is categorized in any one of the following Standard Industrial Classification (SIC) and North American Industry Classification System (NAICS) codes. For inspection purposes, Permittees need not inspect facilities with SIC codes 5013, 5014, 5541, 5511, provided that these facilities have no outside activities or materials that may be exposed to storm water.

Average Monthly Effluent Limitation (AMEL)

The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Bacteria Total Maximum Daily Load (TMDL) Dry Weather

Defined in the Bacteria TMDLs as those days with less than 0.1 inch of rainfall and those days occurring more than 3 days after a rain.

Bacteria Total Maximum Daily Load (TMDL) Wet Weather

Defined in the Bacteria TMDLs as a day with 0.1 inch or more of rain and 3 days following the rain event.

Baseline Waste Load Allocation

The Waste Load Allocation assigned to a Permittee before reductions are required. The progressive reductions in the Waste Load Allocations are based on a percentage of the Baseline Waste Load Allocation. The Baseline Waste Load Allocation for each jurisdiction was calculated based on the annual average amount of trash discharged to the storm drain system from a representative sampling of land use areas, as determined during the Baseline Monitoring Program. The Baseline Waste Load Allocations are incorporated into the Basin Plan at Table 7-2.2.

Basin Plan

The Water Quality Control Plan, Los Angeles Region, Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, adopted by the Regional Water Board on June 13, 1994 and subsequent amendments.

⁵¹ These typically include short-term, high volume discharges resulting from the development or redevelopment of groundwater extraction wells, or USEPA or State-required compliance testing of potable water treatment plants, as part of a USEPA authorized groundwater remediation action under CERCLA.

Beneficial Uses

The existing or potential uses of receiving waters in the permit area as designated by the Regional Water Board in the Basin Plan.

Best Management Practices (BMPs)

BMPs are practices or physical devices or systems designed to prevent or reduce pollutant loading from storm water or non-storm water discharges to receiving waters, or designed to reduce the volume of storm water or non-storm water discharged to the receiving water.

Bioaccumulative

Those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

Biofiltration

A LID BMP that reduces storm water pollutant discharges by intercepting rainfall on vegetative canopy, and through incidental infiltration and/or evapotranspiration, incidental infiltration, and filtration. As described in the *Ventura County Technical Guidance Manual*, studies have demonstrated that bioinfiltration of 1.5 times the storm water quality design volume (SWQDv) provides approximately equivalent or greater reductions in pollutant loading when compared to bioretention or infiltration of the SWQDv.⁵² Incidental infiltration is an important factor in achieving the required pollutant load reduction. Therefore, the term “biofiltration” as used in this Order is defined to include only systems designed to facilitate incidental infiltration or achieve the equivalent pollutant reduction as biofiltration BMPs with an underdrain (subject to Executive Officer approval). Biofiltration BMPs include bioretention systems with an underdrain and bioswales.

Bioretention

A LID BMP that reduces storm water runoff by intercepting rainfall on vegetative canopy, and through evapotranspiration and infiltration. The bioretention system typically includes a minimum 2-foot top layer of a specified soil and compost mixture underlain by a gravel-filled temporary storage pit dug into the *in-situ* soil. As defined in this Order, a bioretention BMP may be designed with an overflow drain, but may not include an underdrain. When a bioretention BMP is designed or constructed with an underdrain it is regulated in this Order as biofiltration.

Bioswale

A LID BMP consisting of a shallow channel lined with grass or other dense, low-growing vegetation. Bioswales are designed to collect storm water runoff and to achieve a uniform sheet flow through the dense vegetation for a period of several minutes.

Carcinogenic

Pollutants are substances that are known to cause cancer in living organisms.

⁵² Geosyntec Consultants and Larry Walker/Walker Associates. 2011. *Ventura County Technical Guidance Manual for Stormwater Quality and Control Measures, Manual Update 2011. Appendix D*. Prepared for the Ventura Countywide Stormwater Quality Management Program. July 13, 2011. pp. D-6 – D-15.

Coefficient of Variation (CV)

CV is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

Commercial Development

Any development on private land that is not heavy industrial or residential. The category includes, but is not limited to: hospitals, laboratories and other medical facilities, educational institutions, recreational facilities, plant nurseries, car wash facilities; mini-malls and other business complexes, shopping malls, hotels, office buildings, public warehouses and other light industrial complexes.

Commercial Malls

Any development on private land comprised of one or more buildings forming a complex of stores which sells various merchandise, with interconnecting walkways enabling visitors to easily walk from store to store, along with parking area(s). A commercial mall includes, but is not limited to: mini-malls, strip malls, other retail complexes, and enclosed shopping malls or shopping centers.

Conditionally Exempt Essential Non-Storm Water Discharge

Conditionally exempt essential non-storm water discharges are certain categories of discharges that are not composed entirely of storm water and that are allowed by the Regional Water Board to discharge to the MS4, if in compliance with all specified requirements; are not otherwise regulated by an individual or general NPDES permit; and are essential public services that are directly or indirectly required by other State or federal statute and/or regulation. These include non-storm water discharges from potable water sources and non-emergency fire fighting activities. Conditionally exempt essential non-storm water discharges may contain minimal amounts of pollutants, however, when in compliance with industry standard BMPs and control measures, do not result in significant environmental effects. (See 55 Fed. Reg. 47990, 47995 (Nov. 16, 1990)).

Conditionally Exempt Non-Storm Water Discharge

Conditionally exempt non-storm water discharges are certain categories of discharges that are not composed entirely of storm water and that are either not sources of pollutants or may contain only minimal amounts of pollutants and when in compliance with specified BMPs do not result in significant environmental effects. (See 55 Fed. Reg. 47990, 47995 (Nov. 16, 1990)).

Construction

Any development on private land that is not heavy industrial or residential. The category includes, but is not limited to: hospitals, laboratories and other medical facilities, educational institutions, recreational facilities, plant nurseries, car wash facilities, mini-malls and other

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business complexes, shopping malls, hotels, office buildings, public warehouses and other light industrial complexes.

Control

To minimize, reduce, eliminate, or prohibit by technological, legal, contractual or other means, the discharge of pollutants from an activity or activities.

Daily Discharge

Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

Daily Generation Rate (DGR)

The estimated amount of trash deposited within a representative drainage area during a 24-hour period, derived from the amount of trash collected from streets and catch basins in the area over a 30-day period.

Dechlorinated/Debrominated Swimming Pool Discharge

Swimming pool discharges which have no measurable chlorine or bromine and do not contain any detergents, wastes, or additional chemicals not typically found in swimming pool water. The term does not include swimming pool filter backwash.

Detected, but Not Quantified (DNQ)

DNQ are those sample results less than the RL, but greater than or equal to the laboratory's MDL.

Development

Any construction, rehabilitation, redevelopment or reconstruction of any public or private residential project (whether single-family, multi-unit or planned unit development); industrial, commercial, retail and other non-residential projects, including public agency projects; or mass grading for future construction. It does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of facility, nor does it include emergency construction activities required to immediately protect public health and safety

Dilution Credit

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Dilution Credit is the amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.

Directly Adjacent

Situated within 200 feet of the contiguous zone required for the continued maintenance, function, and structural stability of the environmentally sensitive area.

Director

The Director of a municipality and Person(s) designated by and under the Director's instruction and supervision.

Discharge

When used without qualification the "discharge of a pollutant."

Discharging Directly

Outflow from a drainage conveyance system that is composed entirely or predominantly of flows from the subject, property, development, subdivision, or industrial facility, and not commingled with the flows from adjacent lands.

Discharge of a Pollutant

Any addition of any "pollutant" or combination of pollutants to "waters of the United States" from any "point source" or, any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation. The term discharge includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works.

Disturbed Area

An area that is altered as a result of clearing, grading, and/or excavation.

Effective Impervious Area (EIA)

EIA is the portion of the surface area that is hydrologically connected to a drainage system via a hardened conveyance or impervious surface without any intervening median to mitigate the flow volume.

Effluent Concentration Allowance (ECA)

ECA is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

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Effluent Limitation

Any restriction imposed on quantities, discharge rates, and concentrations of pollutants, which are discharged from point sources to waters of the U.S. (40 CFR § 122.2).

Enclosed Bays

Enclosed Bays means indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

Environmentally Sensitive Areas (ESAs)

An area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which would be easily disturbed or degraded by human activities and developments (California Public Resources Code § 30107.5). Areas subject to storm water mitigation requirements are: areas designated as Significant Ecological Areas by the County of Los Angeles (Los Angeles County Significant Areas Study, Los Angeles County Department of Regional Planning (1976) and amendments); an area designated as a Significant Natural Area by the California Department of Fish and Game's Significant Natural Areas Program, provided that area has been field verified by the Department of Fish and Game; an area listed in the Basin Plan as supporting the "Rare, Threatened, or Endangered Species (RARE)" beneficial use; and an area identified by a Permittee as environmentally sensitive.

Estimated Chemical Concentration

The estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

Estuaries

Estuaries means waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in California Water Code section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

Existing Discharger

Any discharger that is not a new discharger. An existing discharger includes an "increasing discharger" (i.e., any existing facility with treatment systems in place for its current discharge that is or will be expanding, upgrading, or modifying its permitted discharge after the effective date of this Order).

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Flow-through treatment BMPs

Flow-through treatment BMPs include modular, vault type “high flow biotreatment” devices contained within an impervious vault with an underdrain or designed with an impervious liner and an underdrain.

Full Capture System

Any single device or series of devices, certified by the Executive Officer, that traps all particles retained by a 5 mm mesh screen and has a design treatment capacity of not less than the peak flow rate Q resulting from a one-year, one-hour storm in the sub-drainage area. The Rational Equation is used to compute the peak flow rate:

$$Q = C \times I \times A,$$

Where:

Q = design flow rate (cubic feet per second, cfs);

C = runoff coefficient (dimensionless);

I = design rainfall intensity (inches per hour, as determined per the Los Angeles County rainfall isohyetal maps relevant to the Los Angeles River watershed), and

A = sub-drainage area (acres).

General Construction Activities Storm Water Permit (GCASP)

The general NPDES permit adopted by the State Board which authorizes the discharge of storm water from construction activities under certain conditions.

General Industrial Activities Storm Water Permit (GIASP)

The general NPDES permit adopted by the State Board which authorizes the discharge of storm water from certain industrial activities under certain conditions.

Green Roof

A LID BMP using planter boxes and vegetation to intercept rainfall on the roof surface. Rainfall is intercepted by vegetation leaves and through evapotranspiration. Green roofs may be designed as either a bioretention BMP or as a ~~planter box flow-through treatment~~ biofiltration BMP. To receive credit as a bioretention BMP, the green roof system planting medium shall be of sufficient depth to provide capacity within the pore space volume to contain the design storm depth and may not be designed or constructed with an underdrain.

Hillside

Property located in an area with known erosive soil conditions, where the development contemplates grading on any natural slope that is 25% or greater and where grading contemplates cut or fill slopes.

Illicit Connection

Any man-made conveyance that is connected to the storm drain system without a permit, excluding roof drains and other similar type connections. Examples include channels, pipelines, conduits, inlets, or outlets that are connected directly to the storm drain system.

Illicit DischargeR
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Any discharge into the MS4 or from the MS4 into a receiving water that is prohibited under local, state, or federal statutes, ordinances, codes, or regulations. The term illicit discharge includes any non-storm water discharge, except authorized non-storm water discharges; conditionally exempt non-storm water discharges; and non-storm water discharges resulting from natural flows specifically identified in Part III.A.1.d.

Illicit Disposal

Any disposal, either intentionally or unintentionally, of material(s) or waste(s) that can pollute storm water.

Improved drainage system

An improved drainage system is a drainage system that has been channelized or armored. The clearing or dredging of a natural drainage system does not cause the system to be classified as an improved drainage system.

Industrial/Commercial Facility

Any facility involved and/or used in the production, manufacture, storage, transportation, distribution, exchange or sale of goods and/or commodities, and any facility involved and/or used in providing professional and non-professional services. This category of facilities includes, but is not limited to, any facility defined by either the Standard Industrial Classifications (SIC) or the North American Industry Classification System (NAICS). Facility ownership (federal, state, municipal, private) and profit motive of the facility are not factors in this definition.

Industrial Activities Storm Water General Permit (IASGP)

The general NPDES permit adopted by the State Water Board, which authorizes the discharge of storm water from certain industrial activities under certain conditions.

Industrial Park

A land development that is set aside for industrial development. Industrial parks are usually located close to transport facilities, especially where more than one transport modalities coincide: highways, railroads, airports, and navigable rivers. It includes office parks, which have offices and light industry.

Infiltration BMP

A LID BMP that reduces storm water runoff by capturing and infiltrating the runoff into in-situ soils or amended on-site soils. Examples of infiltration BMPs include infiltration basins, dry wells, and pervious pavement.⁵³

Inland Surface Waters

All surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

⁵³ Some types of infiltration BMPs such as dry wells, may meet the definition of a Class V, deep well injection facility and may be subject to permitting under U.S. EPA requirements.

Inspection

Entry and the conduct of an on-site review of a facility and its operations, at reasonable times, to determine compliance with specific municipal or other legal requirements. The steps involved in performing an inspection, include, but are not limited to:

1. Pre-inspection documentation research.;
2. Request for entry;
3. Interview of facility personnel;
4. Facility walk-through.
5. Visual observation of the condition of facility premises;
6. Examination and copying of records as required;
7. Sample collection (if necessary or required);
8. Exit conference (to discuss preliminary evaluation); and,
9. Report preparation, and if appropriate, recommendations for coming into compliance.

In the case of restaurants, a Permittee may conduct an inspection from the curbside, provided that such "curbside" inspection provides the Permittee with adequate information to determine an operator's compliance with BMPs that must be implemented per requirements of this Order, Regional Board Resolution 98-08, County and municipal ordinances, and the SQMP.

Instantaneous Maximum Effluent Limitation

The highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation

The lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

Institutional Controls

Programmatic trash control measures that do not require construction or structural modifications to the MS4. Examples include street sweeping, public education, and clean out of catch basins that discharge to storm drains.

[Integrated Pest Management \(IPM\)](#) is an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as [biological control](#), [habitat manipulation](#), [modification of cultural practices](#), and [use of resistant varieties](#).

Large Municipal Separate Storm Sewer System (MS4)

All MS4s that serve a population greater than 250,000 (1990 Census) as defined in 40 CFR 122.26 (b)(4). The Regional Board designated Los Angeles County as a large MS4 in 1990, based on: (i) the U.S. Census Bureau 1990 population count of 8.9 million, and (ii) the interconnectivity of the MS4s in the incorporated and unincorporated areas within the County.

Local SWPPP

The Storm Water Pollution Prevention Plan required by the local agency for a project that disturbs one or more acres of land.

Low Impact Development (LID)

LID consists of building and landscape features designed to retain or filter storm water runoff.

Major Outfall

Major municipal separate storm sewer outfall (or “major outfall”) means a municipal separate storm sewer outfall that discharges from a single pipe with an inside diameter of 36 inches or more or its equivalent (discharge from a single conveyance other than circular pipe which is associated with a drainage area of more than 50 acres); or for municipal separate storm sewers that receive storm water from lands zoned for industrial activity (based on comprehensive zoning plans or the equivalent), an outfall that discharges from a single pipe with an inside diameter of 12 inches or more or from its equivalent (discharge from other than a circular pipe associated with a drainage area of 2 acres or more). (40 CFR § 122.26(b)(5))

Maximum Daily Effluent Limitation (MDEL)

The highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Maximum Extent Practicable (MEP)

In selecting BMPs which will achieve MEP, it is important to remember that municipalities will be responsible to reduce the discharge of pollutants in storm water to the maximum extent practicable. This means choosing effective BMPs, and rejecting applicable BMPs only where other effective BMPs will serve the same purpose, the BMPs would not be technically feasible, or the cost would be prohibitive. The following factors may be useful to consider:

1. Effectiveness: Will the BMP address a pollutant of concern?
2. Regulatory Compliance: Is the EMP in compliance with storm water regulations as well as other environmental regulations?
3. Public acceptance: Does the BMP have public support?
4. Cost: Will the cost of implementing the BMP have a reasonable relationship to the pollution control benefits to be achieved?
5. Technical Feasibility: Is the BMP technically feasible considering soils, geography, water resources, etc.?

After selecting a menu of BMPs, it is of course the responsibility of the discharger to insure that all BMPs are implemented.

Median

The middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, then the median = $X_{(n+1)/2}$. If n is even, then the median = $(X_{n/2} + X_{(n/2)+1})/2$ (i.e., the midpoint between the $n/2$ and $n/2+1$).

Method Detection Limit (MDL)

MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in 40 CFR Part 136, Attachment B (revised as of July 3, 1999).

Minimum Level (ML)

ML is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Mixing Zone

Mixing Zone is a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

Municipal Separate Storm Sewer System (MS4)

A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

(i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;

(ii) Designed or used for collecting or conveying storm water;

(iii) Which is not a combined sewer; and

(iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR § 122.2.

(40 CFR § 122.26(b)(8))

National Pollutant Discharge Elimination System (NPDES)

The national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under CWA §307, 402, 318, and 405. The term includes an “approved program.”

Natural Drainage System

A natural drainage system is a drainage system that has not been improved (e.g., channelized or armored). The clearing or dredging of a natural drainage system does not cause the system to be classified as an improved drainage system.

New Development

Land disturbing activities; structural development, including construction or installation of a building or structure, creation of impervious surfaces; and land subdivision.

Non-Storm Water DischargeR
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Any discharge into the MS4 or from the MS4 into a receiving water that is not composed entirely of storm water.

Not Detected (ND)

Sample results which are less than the laboratory's MDL.

Nuisance

Anything that meets all of the following requirements: (1) is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property; (2) affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.; (3) occurs during, or as a result of, the treatment or disposal of wastes.

Ocean Waters

The territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. Discharges to ocean waters are regulated in accordance with the State Water Board's California Ocean Plan.

Outfall

A point source as defined by 40 CFR 122.2 at the point where a municipal separate storm sewer discharges to waters of the United States and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances with connect segments of the same stream or other waters of the United States and are used to convey waters of the United States. (40 CFR § 122.26(b)(9))

Parking Lot

Land area or facility for the parking or storage of motor vehicles used for businesses, commerce, industry, or personal use, with a lot size of 5,000 square feet or more of surface area, or with 25 or more parking spaces.

Partial Capture Device

Any structural trash control device that has not been certified by the Executive Officer as meeting the "full capture" performance requirements.

Permittee(s)

Co-Permittees and any agency named in this Order as being responsible for permit conditions within its jurisdiction. Permittees to this Order include the Los Angeles County Flood Control District, Los Angeles County, and the cities of Agoura Hills, Alhambra, Arcadia, Artesia, Azusa, Baldwin Park, Bellflower, Bell Gardens, Beverly Hills, Bradbury, Burbank, Calabasas, Carson, Cerritos, Claremont, Commerce, Compton, Covina, Cudahy, Culver City, Diamond Bar, Downey, Duarte, El Monte, El Segundo, Gardena, Glendale, Glendora, Hawaiian Gardens, Hawthorne, Hermosa Beach, Hidden Hills, Huntington Park, Industry, Inglewood, Irwindale, La Canada Flintridge, La Habra Heights, Lakewood, La Mirada, La Puente, La Verne, Lawndale, Lomita, Los Angeles, Lynwood, Malibu, Manhattan Beach, Maywood, Monrovia, Montebello, Monterey Park, Norwalk, Palos Verdes Estates, Paramount, Pasadena, Pico Rivera, Pomona, Rancho Palos Verdes, Redondo Beach, Rolling Hills, Rolling Hills Estates, Rosemead, San Dimas, San Fernando, San Gabriel, San Marino, Santa Clarita, Santa Fe Springs, Santa

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Monica, Sierra Madre, Signal Hill, South El Monte, South Gate, South Pasadena, Temple City, Torrance, Vernon, Walnut, West Covina, West Hollywood, Westlake Village, and Whittier.

Persistent Pollutants

Persistent pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

Planning Priority Projects

Those projects that are required to incorporate appropriate storm water mitigation measures into the design plan for their respective project. These types of projects include:

1. Ten or more unit homes (includes single family homes, multifamily homes, condominiums, and apartments)
2. A 100,000 or more square feet of impervious surface area industrial/ commercial development (1 ac starting March 2003)
3. Automotive service facilities (SIC 5013, 5014, 5541, 7532-7534, and 7536-7539)
4. Retail gasoline outlets
5. Restaurants (SIC 5812)
6. Parking lots 5,000 square feet or more of surface area or with 25 or more parking spaces
7. Redevelopment projects in subject categories that meet Redevelopment thresholds
8. Projects located in or directly adjacent to or discharging directly to an ESA, which meet thresholds; and
9. Those projects that require the implementation of a site-specific plan to mitigate post-development storm water for new development not requiring a SUSMP but which may potentially have adverse impacts on post-development storm water quality, where the following project characteristics exist:
 - a) Vehicle or equipment fueling areas;
 - b) Vehicle or equipment maintenance areas, including washing and repair;
 - c) Commercial or industrial waste handling or storage;
 - d) Outdoor handling or storage of hazardous materials;
 - e) Outdoor manufacturing areas;
 - f) Outdoor food handling or processing;
 - g) Outdoor animal care, confinement, or slaughter; or
- h) Outdoor horticulture activities.

~~Planter boxes and other flow-through treatment BMPs~~

~~Planter boxes and other flow-through treatment BMPs include modular, vault type planter boxes or "high flow biotreatment" devices contained within an impervious vault with an underdrain or designed with an impervious liner and an underdrain. Planter boxes do not allow for incidental infiltration and therefore do not meet the requirements for biofiltration as defined in this Order. However, planter boxes may be used to meet the Water Quality Mitigation Criteria as specified in Part VI.D.6.c.iv of this Order.~~

Point Source

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Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff. (40 CFR § 122.2)

Pollutant Minimization Program (PMP)

PMP means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to California Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

Pollutants

Those "pollutants" defined in CWA §502(6) (33.U.S.C.§1362(6)), and incorporated by reference into California Water Code §13373

Pollution Prevention

Pollution Prevention means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in California Water Code Section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State or Regional Water Board.

Potable Water _____

Water that meets the drinking water standards of the US Environmental Protection Agency.

Potable Water Distribution Systems Releases

Sources of flows from drinking water storage, supply and distribution systems including flows from system failures, pressure releases, system maintenance, distribution line testing, fire hydrant flow testing; and flushing and dewatering of pipes, reservoirs, vaults, and minor non-invasive well maintenance activities not involving chemical addition(s). It does not include wastewater discharges from activities that occur at wellheads, such as well construction, well development (i.e., aquifer pumping tests, well purging, etc.), or major well maintenance.

Project

All development, redevelopment, and land disturbing activities. The term is not limited to "Project" as defined under CEQA (Pub. Resources Code §21065).

Rain Event

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Any rain event greater than 0.1 inch in 24 hours except where specifically stated otherwise

Rainfall Harvest and Use

Rainfall harvest and use is an LID BMP system designed to capture runoff, typically from a roof but can also include runoff capture from elsewhere within the site, and to provide for temporary storage until the harvested water can be used for irrigation or non-potable uses. The harvested water may also be used for potable water uses if the system includes disinfection treatment and is approved for such use by the local building department.

Rare, Threatened, or Endangered Species (RARE)

A beneficial use for waterbodies in the Los Angeles Region, as designated in the Basin Plan (Table 2-1), that supports habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened, or endangered

Receiving Water

A "water of the United States" into which waste and/or pollutants are or may be discharged.

Receiving Water Limitation

Any applicable numeric or narrative water quality objective or criterion, or limitation to implement the applicable water quality objective or criterion, for the receiving water as contained in Chapter 3 or 7 of the Water Quality Control Plan for the Los Angeles Region (Basin Plan), water quality control plans or policies adopted by the State Water Board, or federal regulations, including but not limited to, 40 CFR § 131.38.

Redevelopment

Land-disturbing activity that results in the creation, addition, or replacement of 5,000 square feet or more of impervious surface area on an already developed site. Redevelopment includes, but is not limited to: the expansion of a building footprint; addition or replacement of a structure; replacement of impervious surface area that is not part of a routine maintenance activity; and land disturbing activities related to structural or impervious surfaces. It does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of facility, nor does it include emergency construction activities required to immediately protect public health and safety.

Regional Administrator

The Regional Administrator of the Regional Office of the USEPA or the authorized representative of the Regional Administrator.

Reporting Level (RL)

RL is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from Appendix 4 of the SIP in accordance with Section 2.4.2 of the SIP or established in accordance with Section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in

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cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Residual Water

In the context of this Order, water remaining in a structural BMP subsequent to the drawdown or drainage period. The residual water typically contains high concentration(s) of pollutants.

Restaurant

A facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC Code 5812).

Retail Gasoline Outlet

Any facility engaged in selling gasoline and lubricating oils.

Runoff

Any runoff including storm water and dry weather flows from a drainage area that reaches a receiving water body or subsurface. During dry weather it is typically comprised of base flow either contaminated with pollutants or uncontaminated, and nuisance flows.

Satellite Collection System

The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.

Screening

Using proactive methods to identify illicit connections through a continuously narrowing process. The methods may include: performing baseline monitoring of open channels, conducting special investigations using a prioritization approach, analyzing maintenance records for catch basin and storm drain cleaning and operation, and verifying all permitted connections into the storm drains. Special investigation techniques may include: dye testing, visual inspection, smoke testing, flow monitoring, infrared, aerial and thermal photography, and remote control camera operation.

Sidewalk Rinsing

Means pressure washing of paved pedestrian walkways with average water usage of 0.006 gallons per square foot, with no cleaning agents, and properly disposing of all debris collected, as authorized under Regional Board Resolution No. 98-08.

Significant Ecological Areas (SEAs)

~~Areas designated by the Los Angeles County Board of Supervisors in 1981 with the adoption of the General Plan. The collection of SEAs together was intended to designate critical components of the biodiversity of Los Angeles County as it was known and understood at that time.~~

An area that is determined to possess an example of biotic resources that cumulatively represent biological diversity, for the purposes of protecting biotic diversity, as part of the Los Angeles County General Plan.

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Areas are designated as SEAs, if they possess one or more of the following criteria:

1. The habitat of rare, endangered, and threatened plant and animal species.
2. Biotic communities, vegetative associations, and habitat of plant and animal species that are either one of a kind, or are restricted in distribution on a regional basis.
3. Biotic communities, vegetative associations, and habitat of plant and animal species that are either one of a kind or are restricted in distribution in Los Angeles County.
4. Habitat that at some point in the life cycle of a species or group of species, serves as a concentrated breeding, feeding, resting, migrating grounds and is limited in availability either regionally or within Los Angeles County.
5. Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent an unusual variation in a population or community.
6. Areas important as game species habitat or as fisheries.
7. Areas that would provide for the preservation of relatively undisturbed examples of natural biotic communities in Los Angeles County.
8. Special areas.

Significant Natural Area (SNA)

An area defined by the California Department of Fish and Game (DFG), Significant Natural Areas Program, as an area that contains an important example of California's biological diversity. The most current SNA maps, reports, and descriptions can be downloaded from the DFG website at <ftp://maphost.dfg.ca.gov/outgoing/whdab/sna/>. These areas are identified using the following biological criteria only, irrespective of any administrative or jurisdictional considerations:

1. Areas supporting extremely rare species or habitats.
2. Areas supporting associations or concentrations of rare species or habitats.
3. Areas exhibiting the best examples of rare species and habitats in the state

Site

The land or water area where any "facility or activity" is physically located or conducted, including adjacent land used in connection with the facility or activity.

Source Control BMP

Any schedules of activities, prohibitions of practices, maintenance procedures, managerial practices or operational practices that aim to prevent storm water pollution by reducing the potential for contamination at the source of pollution.

Source of Drinking Water

Any water designated as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan.

SQMP

The Los Angeles Countywide Stormwater Quality Management Program.

Standard Deviation (Σ)

Standard Deviation is a measure of variability that is calculated as follows:

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$$\Sigma = (\Sigma[(x - \bar{x})^2]/(n - 1))^{0.5}$$

where:

x is the observed value;

\bar{x} is the arithmetic mean of the observed values; and

n is the number of samples.

State Storm Water Pollution Prevention Plan (State SWPPP)

A plan, as required by a State General Permit, identifying potential pollutant sources and describing the design, placement and implementation of BMPs, to effectively prevent non-stormwater Discharges and reduce Pollutants in Stormwater Discharges during activities covered by the General Permit.

Storm Water

Storm water runoff, snow melt runoff, and surface runoff and drainage related to precipitation events (pursuant to 40 CFR § 122.26(b)(13); 55 Fed. Reg. 47990, 47995 (Nov. 16, 1990)).

Storm Water Discharge Associated with Industrial Activity

Industrial discharge as defined in 40 CFR 122.26(b)(14).

Stormwater Quality Management Program

The Los Angeles Countywide Stormwater Quality Management Program, which includes descriptions of programs, collectively developed by the Permittees in accordance with provisions of the NPDES Permit, to comply with applicable federal and state law, as the same is amended from time to time.

Structural BMP

Any structural facility designed and constructed to mitigate the adverse impacts of storm water and urban runoff pollution (e.g. canopy, structural enclosure). The category may include both Treatment Control BMPs and Source Control BMPs.

SUSMP

The Los Angeles Countywide Standard Urban Stormwater Mitigation Plan. The SUSMP shall address conditions and requirements of new development.

Total Maximum Daily Load (TMDL)

The sum of the individual waste load allocations for point sources and load allocations for nonpoint sources and natural background.

Toxicity Identification Evaluation (TIE)

A set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.

Toxicity Reduction Evaluation (TRE)

TRE is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an

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evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

Trash Excluders

Any structural trash control device that prevents the discharge of trash to the storm drain system or to receiving waters. A trash exclude may or may not be certified by the Executive Officer as meeting the “full capture” performance requirements.

Treatment

The application of engineered systems that use physical, chemical, or biological processes to remove pollutants. Such processes include, but are not limited to, filtration, gravity settling, media absorption, biodegradation, biological uptake, chemical oxidation and UV radiation.

Treatment Control BMP

Any engineered system designed to remove pollutants by simple gravity settling of particulate pollutants, filtration, biological uptake, media absorption or any other physical, biological, or chemical process.

Unconfined ground water infiltration

Water other than waste water that enters the MS4 (including foundation drains) from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow. (See 40 CFR § 35.2005(20).)

Uncontaminated Ground Water Infiltration

Water other than waste water that enters the MS4 (including foundation drains) from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow. (See 40 CFR § 35.2005(20).)

USEPA Phase I Facilities

Facilities in specified industrial categories that are required to obtain an NPDES permit for storm water discharges, as required by 40 CFR 122.26(c). These categories include:

- i. facilities subject to storm water effluent limitation guidelines, new source performance standards, or toxic pollutant effluent standards (40 CFR N)
- ii. manufacturing facilities
- iii. oil and gas/mining facilities
- iv. hazardous waste treatment, storage, or disposal facilities
- v. landfills, land application sites, and open dumps
- vi. recycling facilities
- vii. steam electric power generating facilities
- viii. transportation facilities
- ix. sewage of wastewater treatment works
- x. light manufacturing facilities

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Vehicle Maintenance/Material Storage Facilities/Corporation Yards

Any Permittee owned or operated facility or portion thereof that:

- i. Conducts industrial activity, operates equipment, handles materials, and provides services similar to Federal Phase I facilities;
- ii. Performs fleet vehicle service/maintenance on ten or more vehicles per day including repair, maintenance, washing, and fueling;
- iii. Performs maintenance and/or repair of heavy industrial machinery/equipment; and
- iv. Stores chemicals, raw materials, or waste materials in quantities that require a hazardous materials business plan or a Spill Prevention, Control, and Countermeasures (SPCC) plan.

Water Quality-based Effluent Limitation

Any restriction imposed on quantities, discharge rates, and concentrations of pollutants, which are discharged from point sources to waters of the U.S. necessary to achieve a water quality standard.

Waters of the State

Any surface water or groundwater, including saline waters, within the boundaries of the state.

Waters of the United States or Waters of the U.S.

- a. All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- b. All interstate waters, including interstate "wetlands";
- c. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
 1. Which are or could be used by interstate or foreign travelers for recreational or other purposes;
 2. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 3. Which are used or could be used for industrial purposes by industries in interstate commerce;

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- d. All impoundments of waters otherwise defined as waters of the United States under this definition;
- e. Tributaries of waters identified in paragraphs (a) through (d) of this definition;
- f. The territorial sea; and
- g. “Wetlands” adjacent to waters (other than waters that are themselves wetlands) identified in paragraph (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR section 423.22(m), which also meet the criteria of this definition) are not waters of the United States. This exclusion applies only to man-made bodies of water, which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area’s status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with USEPA.

Wet Season

The calendar period beginning October 1 through April 15.

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ACRONYMS AND ABBREVIATIONS

AMEL	Average Monthly Effluent Limitation
ASBS	Areas of Special Biological Significance
B	Background Concentration
BAT	Best Available Technology Economically Achievable
Basin Plan	<i>Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties</i>
BCT	Best Conventional Pollutant Control Technology
BMP	Best Management Practices
BMPP	Best Management Practices Plan
BPJ	Best Professional Judgment
BOD	Biochemical Oxygen Demand 5-day @ 20 °C
BPT	Best Practicable Treatment Control Technology
C	Water Quality Objective
CCR	California Code of Regulations
CEEIN	California Environmental Education Interagency Network
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CTR	California Toxics Rule
CV	Coefficient of Variation
CWA	Clean Water Act
CWC	California Water Code
Discharger	Los Angeles County MS4 Permittees
DMR	Discharge Monitoring Report
DNQ	Detected But Not Quantified
ELAP	California Department of Public Health Environmental Laboratory Accreditation Program
ELG	Effluent Limitations, Guidelines and Standards
Ep	Erosion potential
ESCP	Erosion and Sediment Control Plan
Facility	Los Angeles County MS4s
GIS	Geographical Information System
gpd	gallons per day
IC	Inhibition Coefficient
IC ₁₅	Concentration at which the organism is 15% inhibited
IC ₂₅	Concentration at which the organism is 25% inhibited
IC ₄₀	Concentration at which the organism is 40% inhibited
IC ₅₀	Concentration at which the organism is 50% inhibited
IC/ID	Illicit Connection and Illicit Discharge Elimination
IPM	Integrated Pest Management
LA	Load Allocations
LID	Low Impact Development
LOEC	Lowest Observed Effect Concentration
LUPs	Linear Underground/Overhead Projects
µg/L	micrograms per Liter
MCM	Minimum Control Measure

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mg/L	milligrams per Liter
MDEL	Maximum Daily Effluent Limitation
MEC	Maximum Effluent Concentration
MGD	Million Gallons Per Day
ML	Minimum Level
MRP	Monitoring and Reporting Program
MS4	Municipal Separate Storm Sewer System
NAICS	North American Industry Classification System
ND	Not Detected
NOEC	No Observable Effect Concentration
NPDES	National Pollutant Discharge Elimination System
NSPS	New Source Performance Standards
NTR	National Toxics Rule
OAL	Office of Administrative Law
PIPP	Public Information and Participation Program
PMP	Pollutant Minimization Plan
POTW	Publicly Owned Treatment Works
QA	Quality Assurance
QA/QC	Quality Assurance/Quality Control
QSD	Qualified SWPPP Developer
QSP	Qualified SWPPP Practitioner
Ocean Plan	<i>Water Quality Control Plan for Ocean Waters of California</i>
RAP	Reasonable Assurance Program
REAP	Rain Event Action Plan
Regional Water Board	California Regional Water Quality Control Board, Los Angeles Region
RGOs	Retail Gasoline Outlets
RPA	Reasonable Potential Analysis
SCP	Spill Contingency Plan
SEA	Significant Ecological Area
SIC	Standard Industrial Classification
SIP	State Implementation Policy (<i>Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California</i>)
SMR	Self Monitoring Reports
State Water Board	California State Water Resources Control Board
SWPPP	Storm Water Pollution Prevention Plan
SWQDv	Storm Water Quality Design Volume
SWQPA	State Water Quality Protected Area
TAC	Test Acceptability Criteria
Thermal Plan	<i>Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California</i>
TIE	Toxicity Identification Evaluation
TMDL	Total Maximum Daily Load
TOC	Total Organic Carbon
TRE	Toxicity Reduction Evaluation

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TSD	Technical Support Document
TSS	Total Suspended Solid
TU _c	Chronic Toxicity Unit
USEPA	United States Environmental Protection Agency
WDR	Waste Discharge Requirements
WDID	Waste Discharge Identification
WET	Whole Effluent Toxicity
WLA	Waste Load Allocations
WMA	Watershed Management Area
WQBELs	Water Quality-Based Effluent Limitations
WQS	Water Quality Standards
%	Percent

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ATTACHMENT B – WATERSHED MANAGEMENT AREA MAPS

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SANTA CLARA RIVER

- 5. Between West Pier Highway 99 and Blue Cut gauging station
- 6. Between Bouquet Canyon Road Bridge and West Pier Highway 99
- 7. Between Lang gauging station and Bouquet Canyon Road Bridge
- 8. Above Lang gauging station
- 9. SANTA PAULA CREEK above Santa Paula Water Works Diversion Dam
- 10. SESPE CREEK above gauging station, 500' downstream from Little Sespe Creek
- 11. PIRU CREEK above gauging station below Santa Felicia Dam

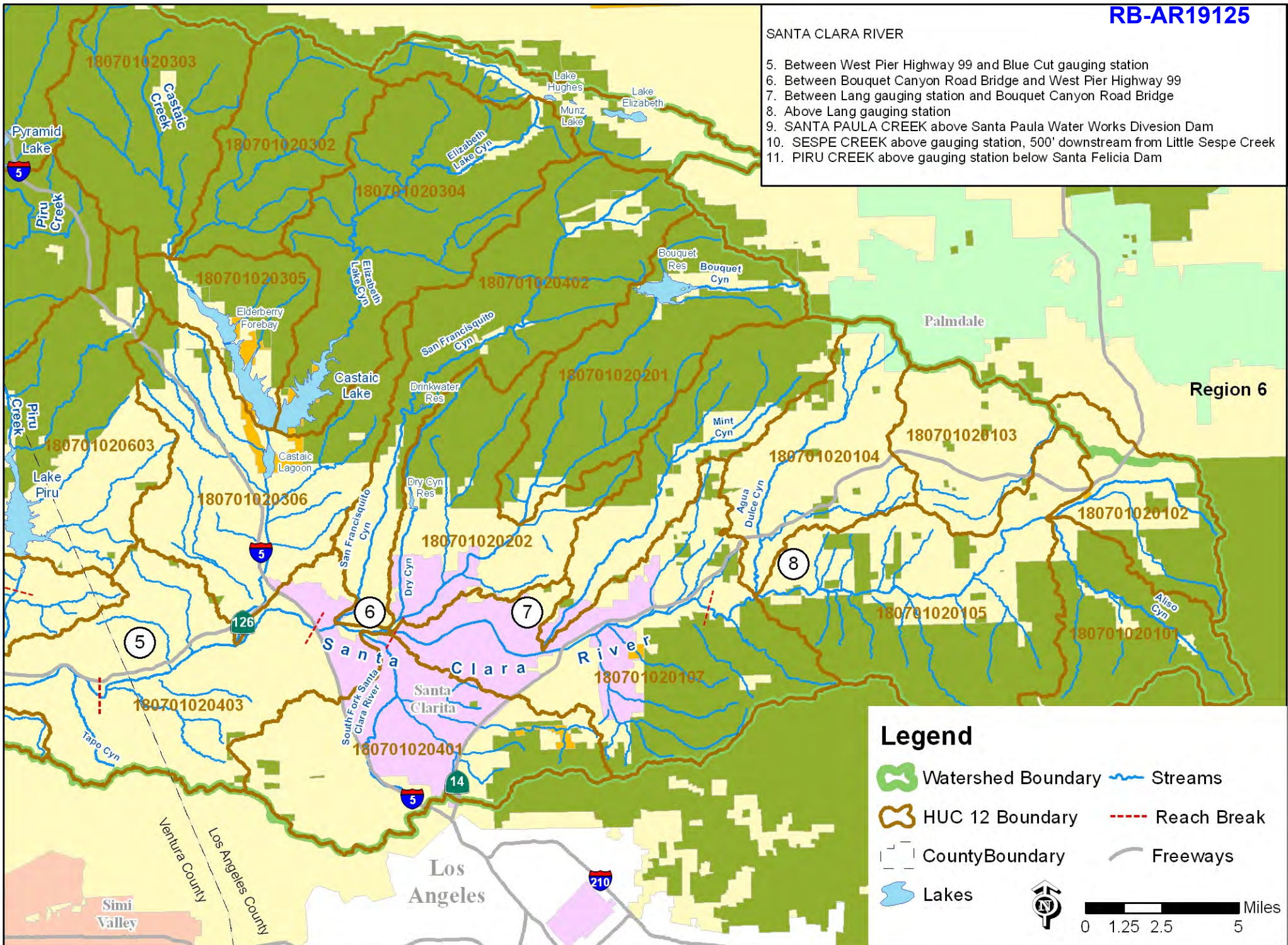


Figure B-1: Upper Santa Clara River Watershed Management Area Hydrologic Units.



Figure B-2: Santa Monica Bay Watershed Management Area Hydrologic Units.

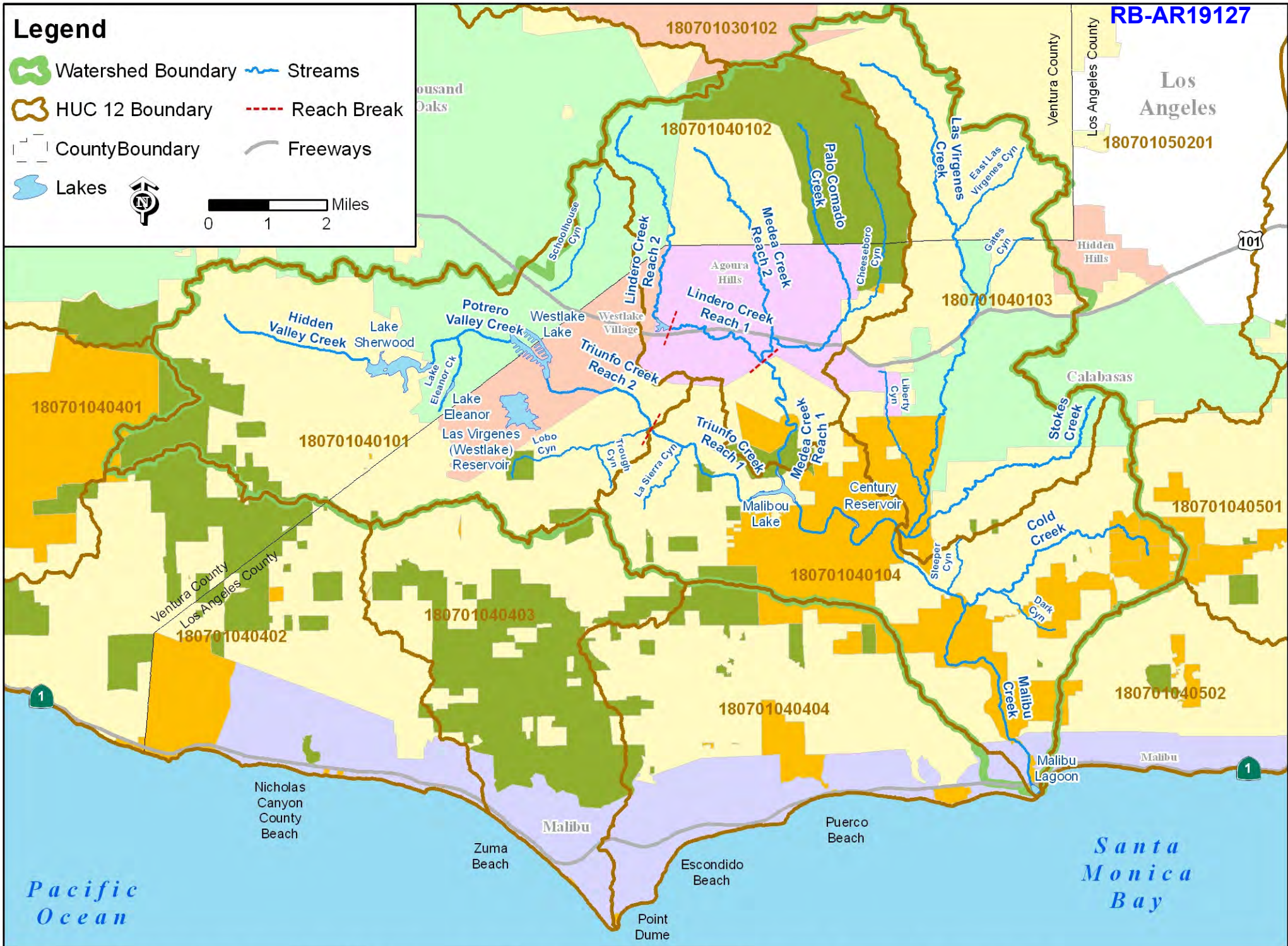


Figure B-2a: Malibu Creek Watershed Hydrologic Units (Santa Monica Bay WMA).

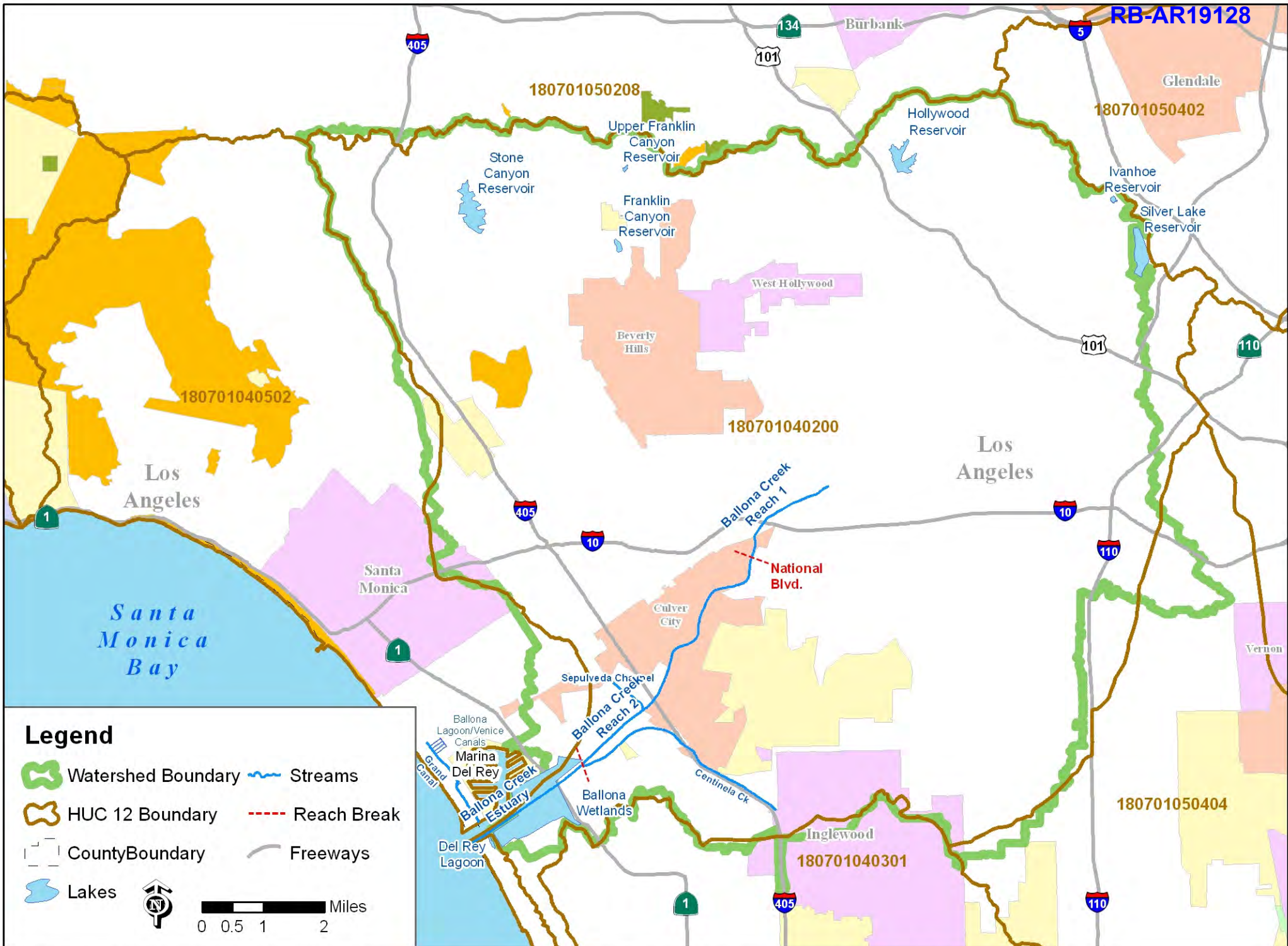


Figure B-2b: Ballona Creek Watershed Hydrologic Units (Santa Monica Bay WMA).

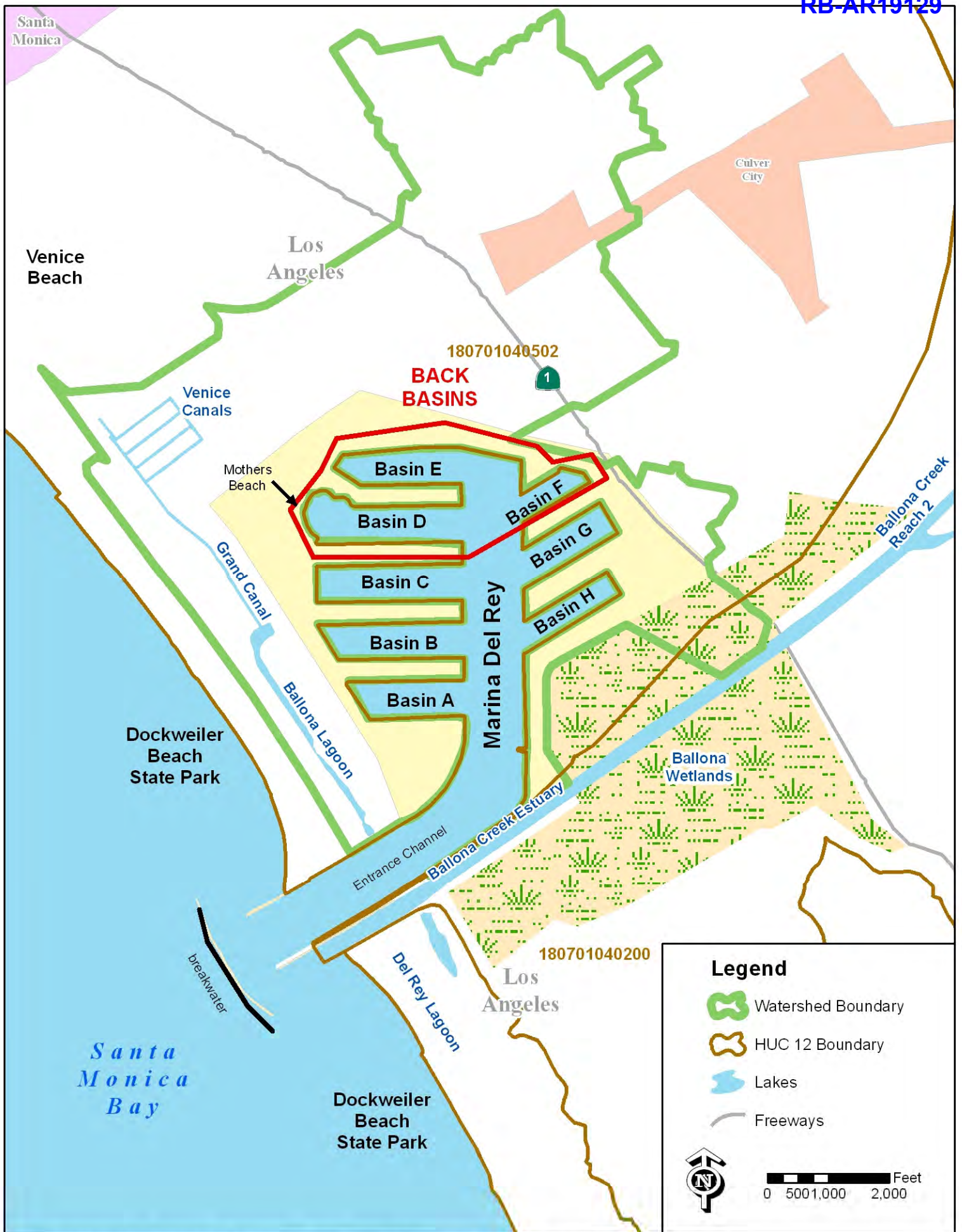


Figure B-2c: Marina Del Rey Watershed Hydrologic Units (Santa Monica Bay WMA).

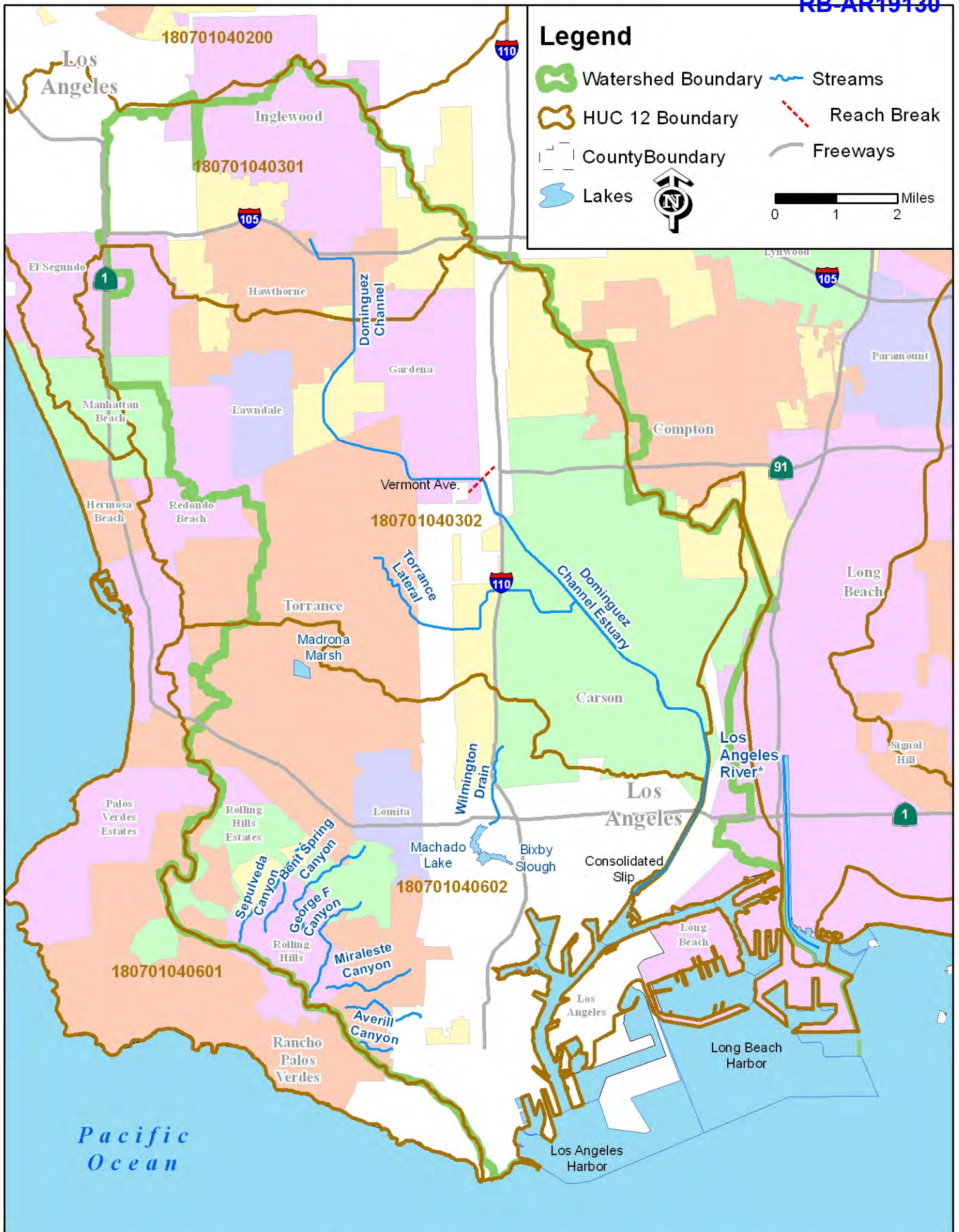


Figure B-3: Dominguez Channel and Los Angeles/Long Beach Harbors Watershed Management Area Hydrologic Units.

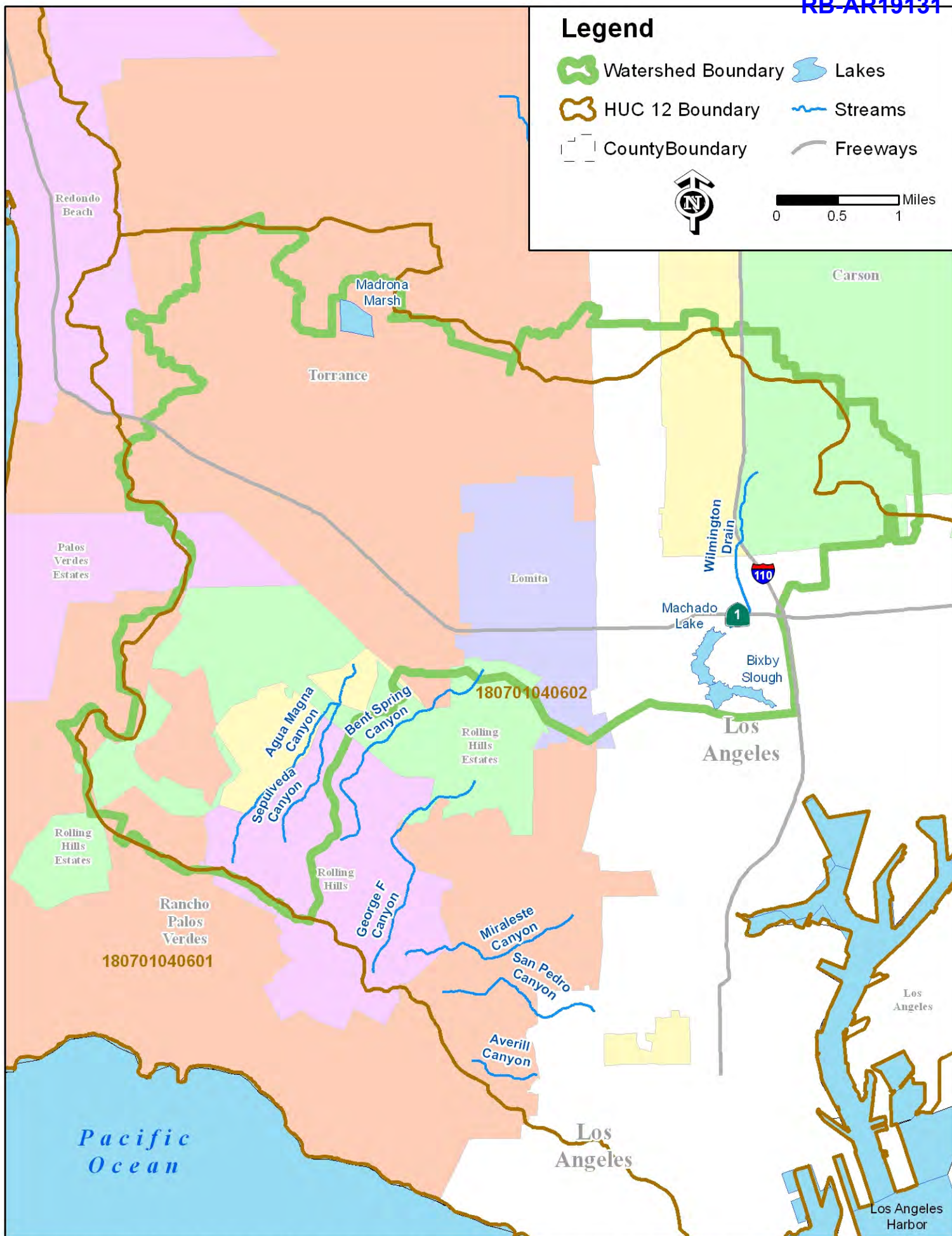


Figure B-3a: Machado Lake Watershed Hydrologic Units (Dominguez Channel & LA/LB Harbors WMA).



- LOS ANGELES RIVER**
1. Between Carson St. and Los Angeles River Estuary
 2. Between Figueroa St. and Carson St.
 3. Between Riverside Drive and Figueroa St.
 4. Between Sepulveda Dam and Riverside Drive
 5. Between Balboa Blvd. and Sepulveda Dam
 6. Above Balboa Blvd.

Legend

- Watershed Boundary
- HUC 12 Boundary
- Reach Break
- Lakes
- Streams
- Reach Break
- Freeways



0 1 2 4 Miles

Figure B-4: Los Angeles River Watershed Management Area Hydrologic Units.

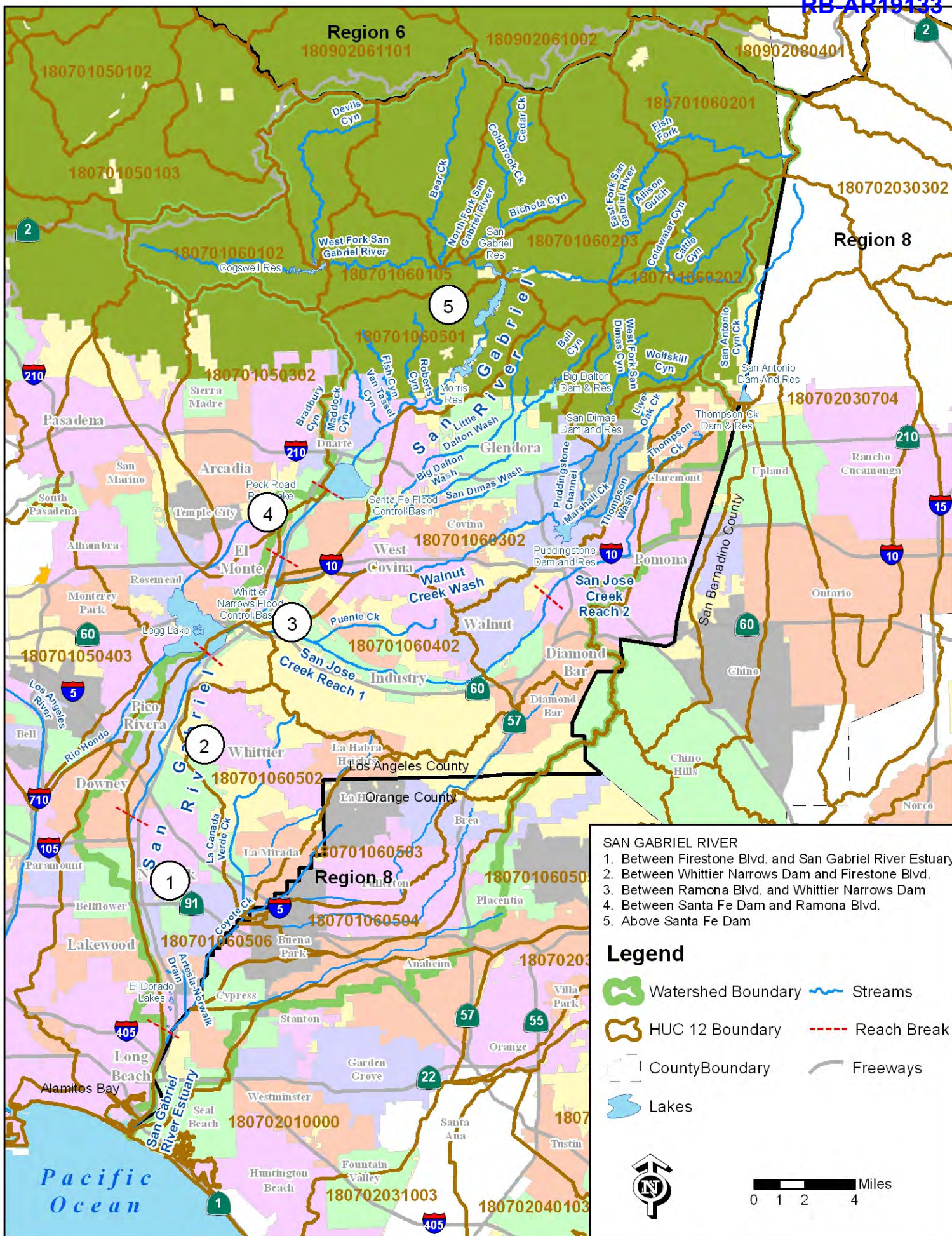


Figure B-5: San Gabriel River Watershed Management Area Hydrologic Units.

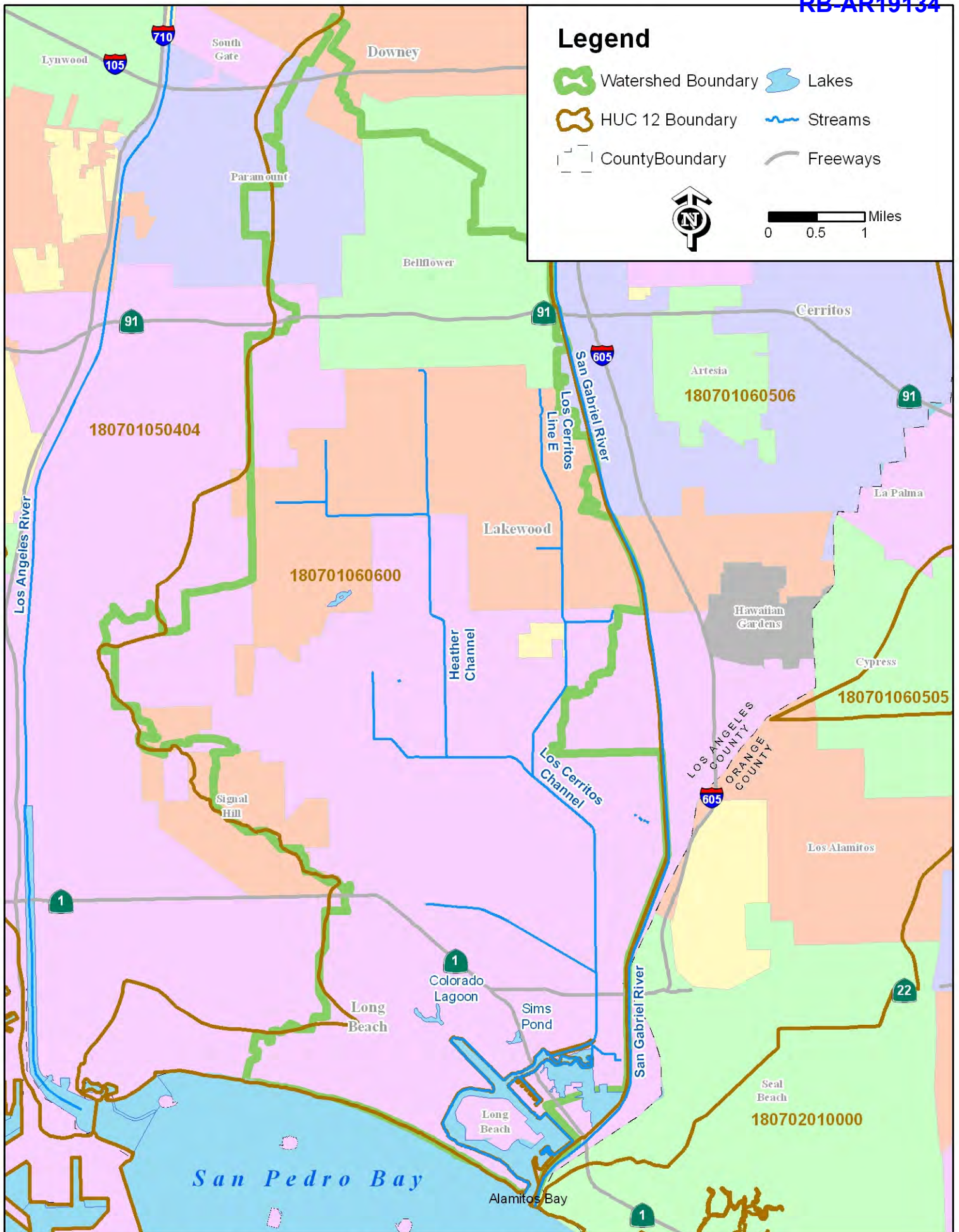


Figure B-6: Los Cerritos Channel and Alamitos Bay Watershed Management Area Hydrologic Units.

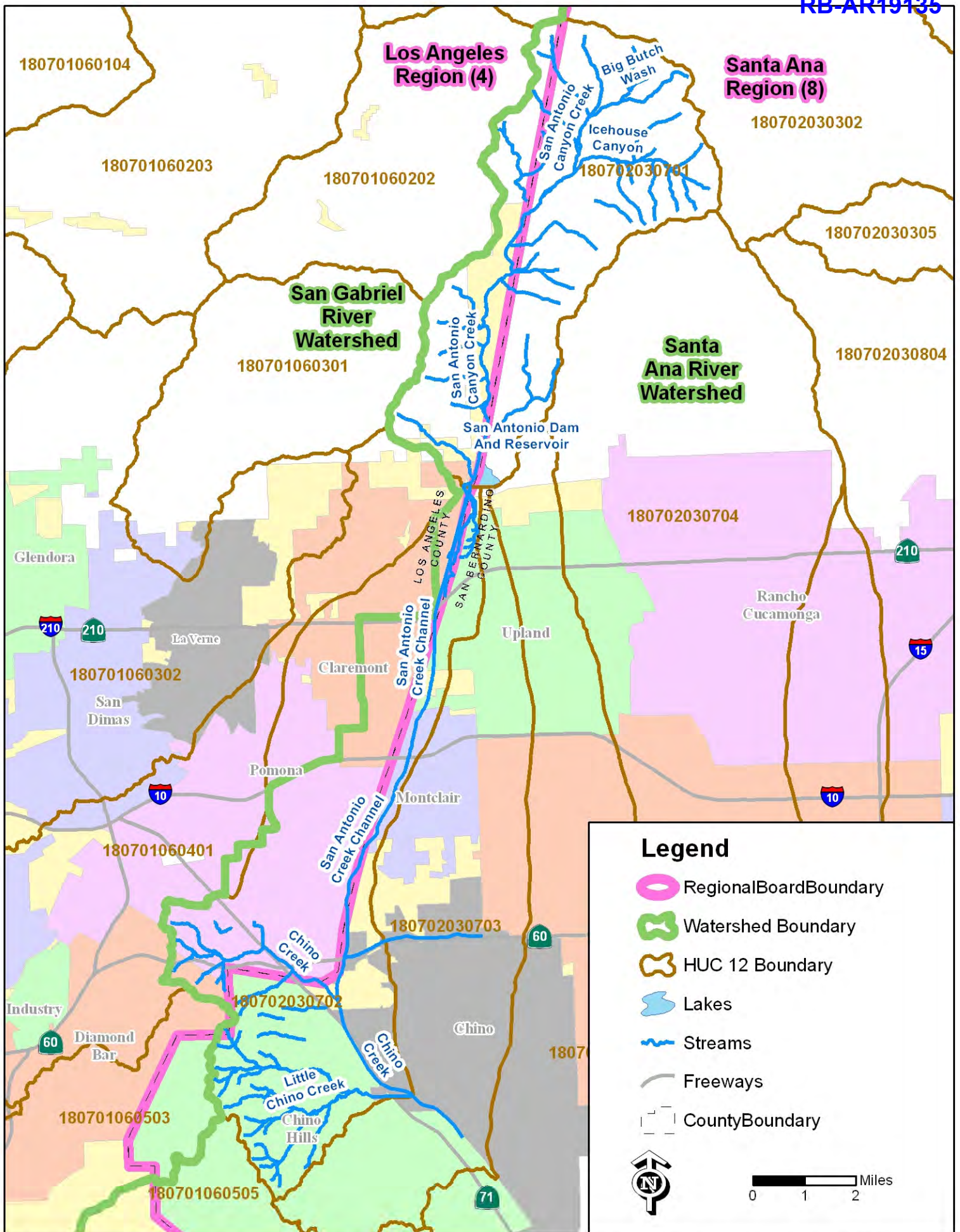


Figure B-7: Middle San Antonio Creek Subwatershed Hydrologic Units.

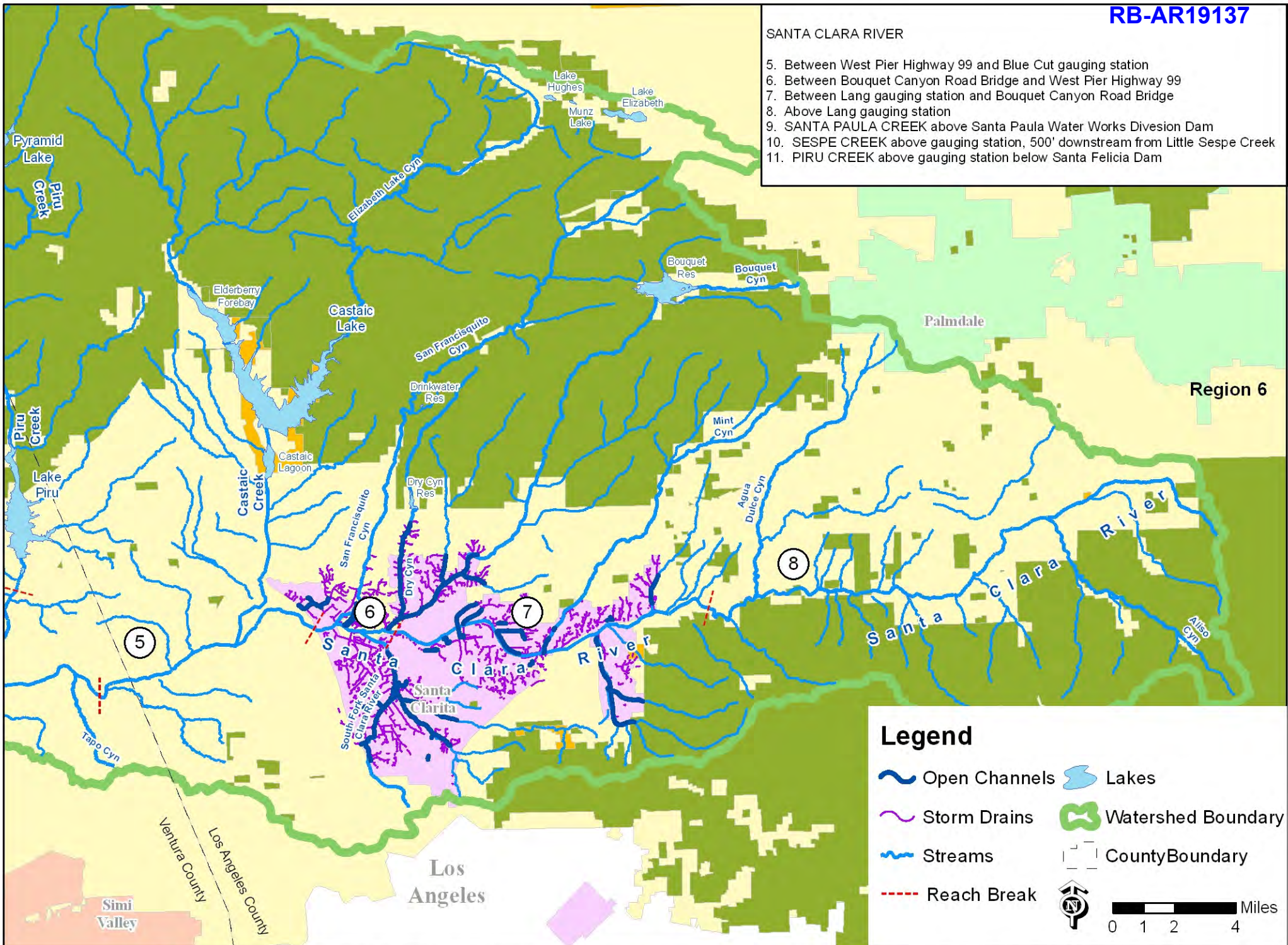
ATTACHMENT C – MS4 MAPS BY WATERSHED MANAGEMENT AREA

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SANTA CLARA RIVER

- 5. Between West Pier Highway 99 and Blue Cut gauging station
- 6. Between Bouquet Canyon Road Bridge and West Pier Highway 99
- 7. Between Lang gauging station and Bouquet Canyon Road Bridge
- 8. Above Lang gauging station
- 9. SANTA PAULA CREEK above Santa Paula Water Works Diversion Dam
- 10. SESPE CREEK above gauging station, 500' downstream from Little Sespe Creek
- 11. PIRU CREEK above gauging station below Santa Felicia Dam



Legend

- Open Channels
 - Storm Drains
 - Streams
 - Reach Break
 - Lakes
 - Watershed Boundary
 - County Boundary
- 0 1 2 4 Miles

Figure C-1: Upper Santa Clara River Watershed Management Area Flow Schematic.

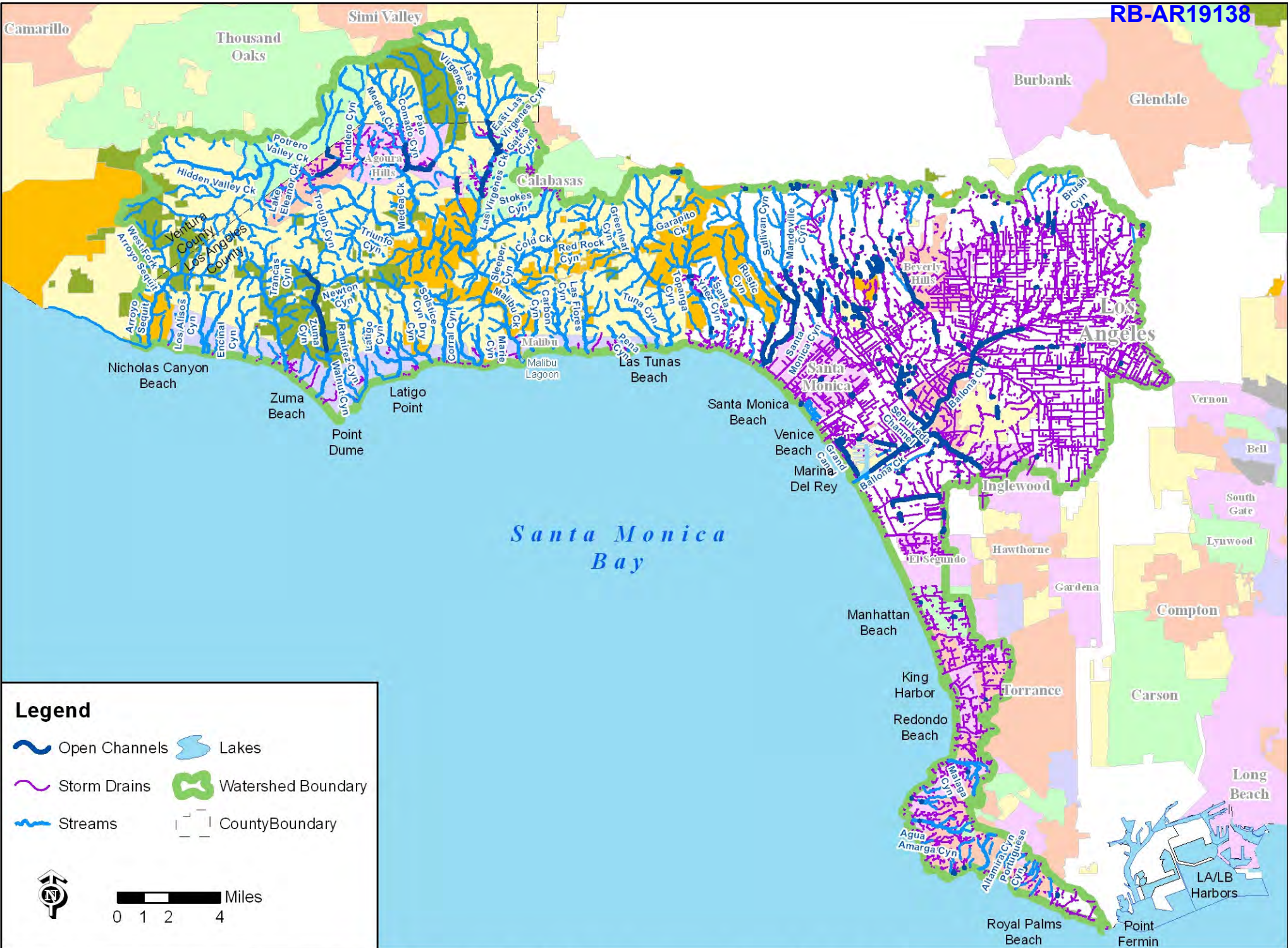


Figure C-2: Santa Monica Bay Watershed Management Area Flow Schematic.

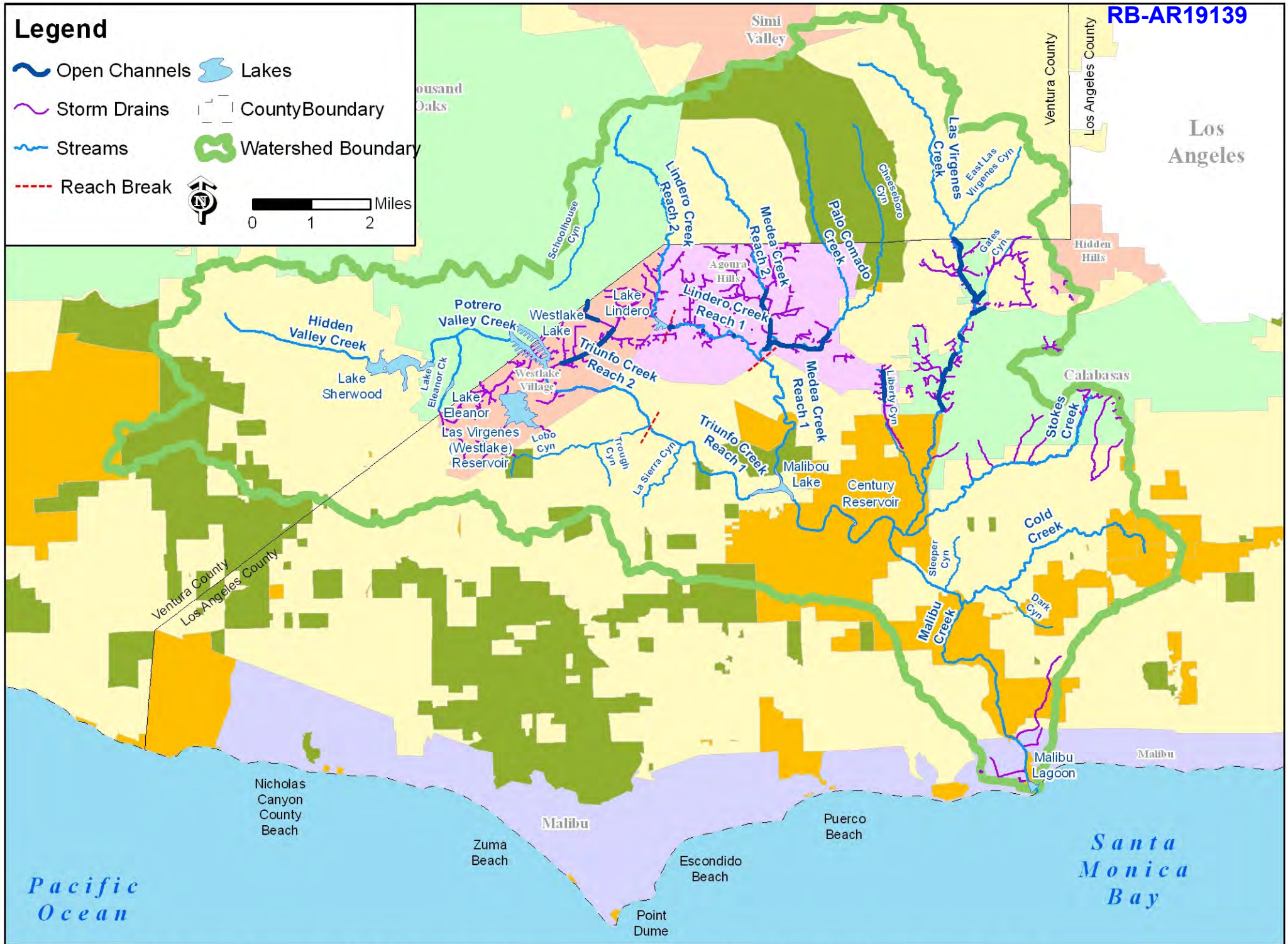
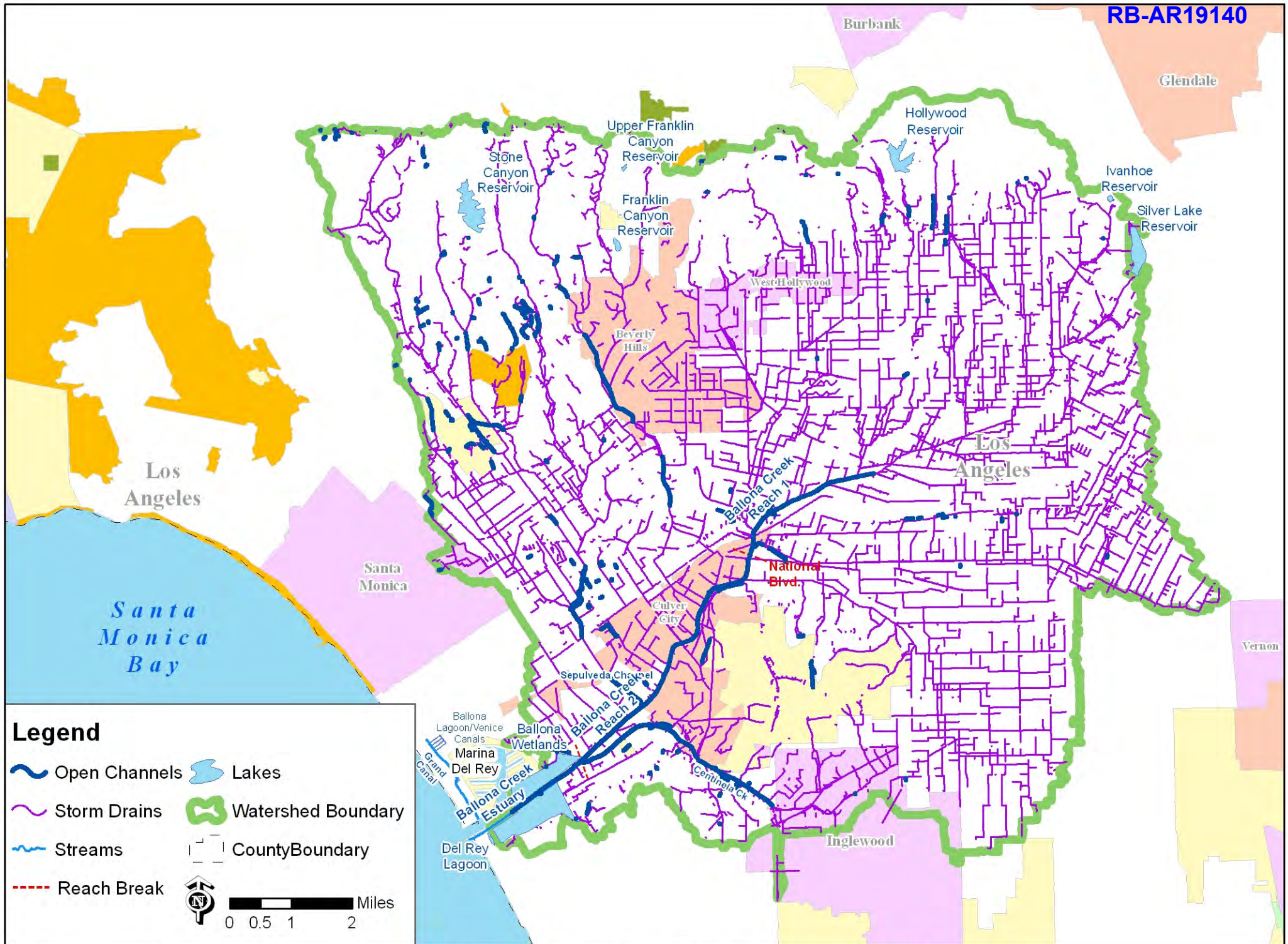


Figure C-2a: Malibu Creek Watershed Flow Schematic (Santa Monica Bay WMA).



Legend

- Open Channels
- Storm Drains
- Streams
- Reach Break
- Lakes
- Watershed Boundary
- County Boundary

0 0.5 1 2 Miles

Figure C-2b: Ballona Creek Watershed Flow Schematic (Santa Monica Bay WMA).



Figure C-2c: Marina Del Rey Watershed Flow Schematic (Santa Monica Bay WMA).

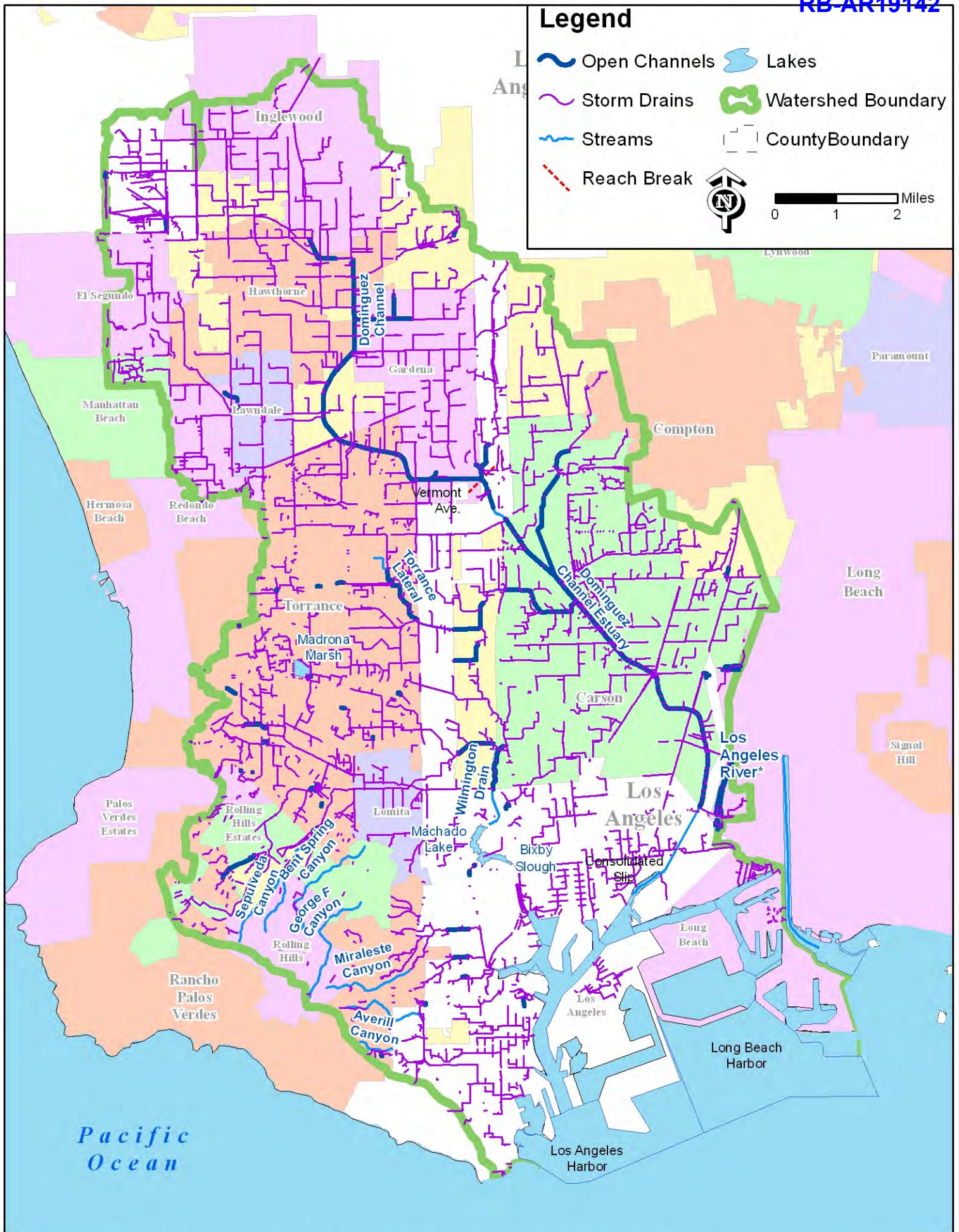


Figure C-3: Dominguez Channel and Los Angeles/Long Beach Harbors Watershed Management Area Flow Schematic.

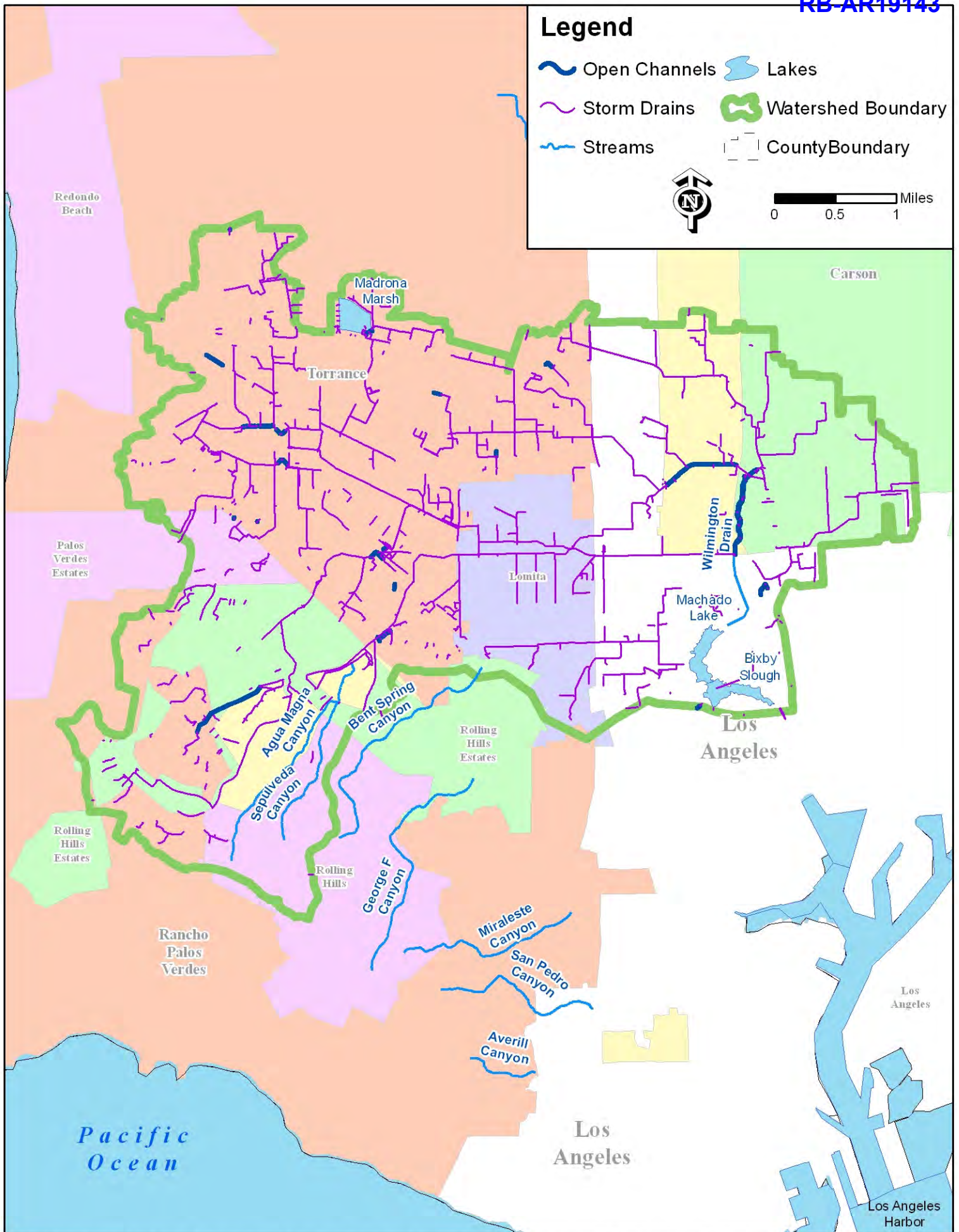


Figure C-3a: Machado Lake Watershed Flow Schematic (Dominguez Channel & LA/LB Harbors WMA).

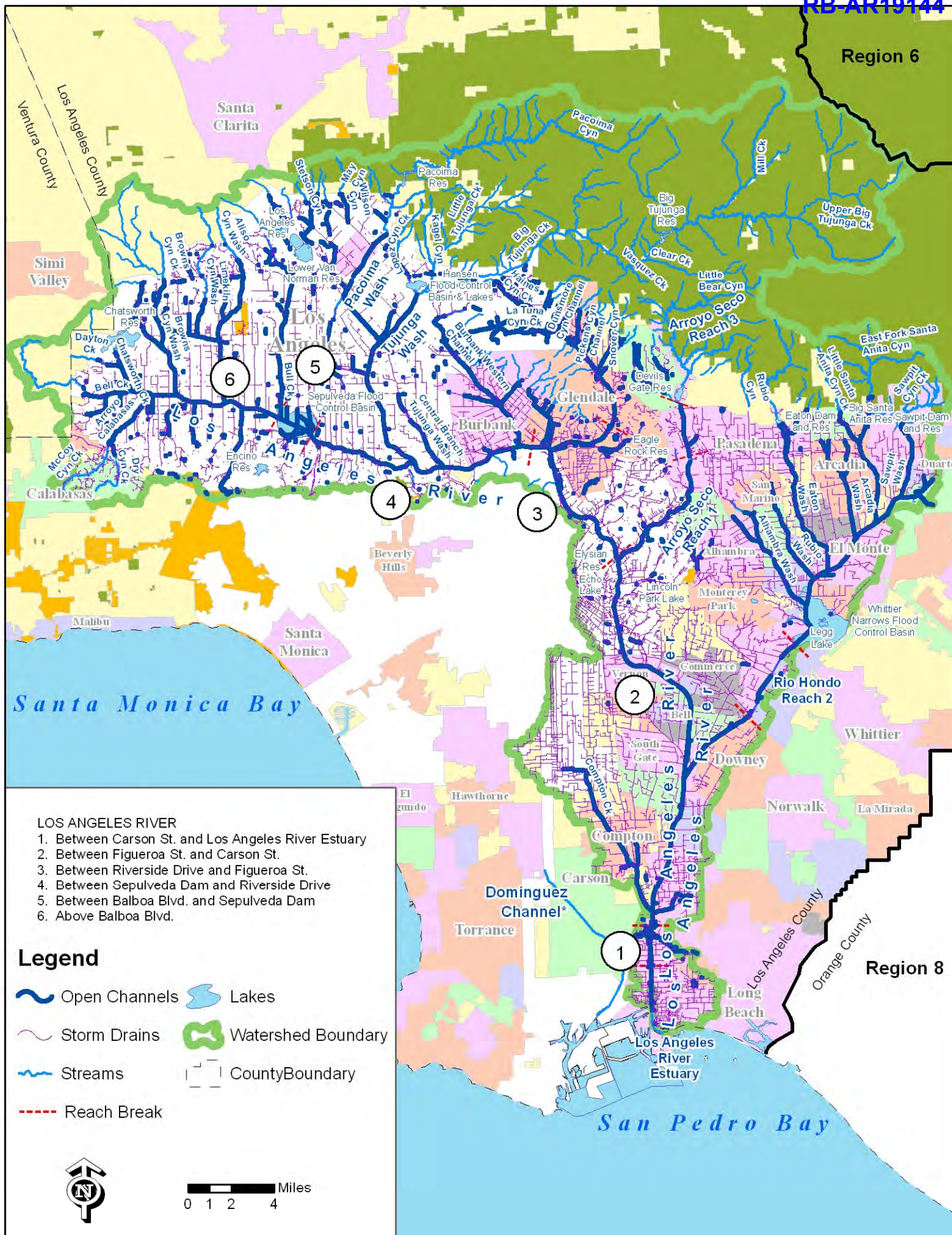
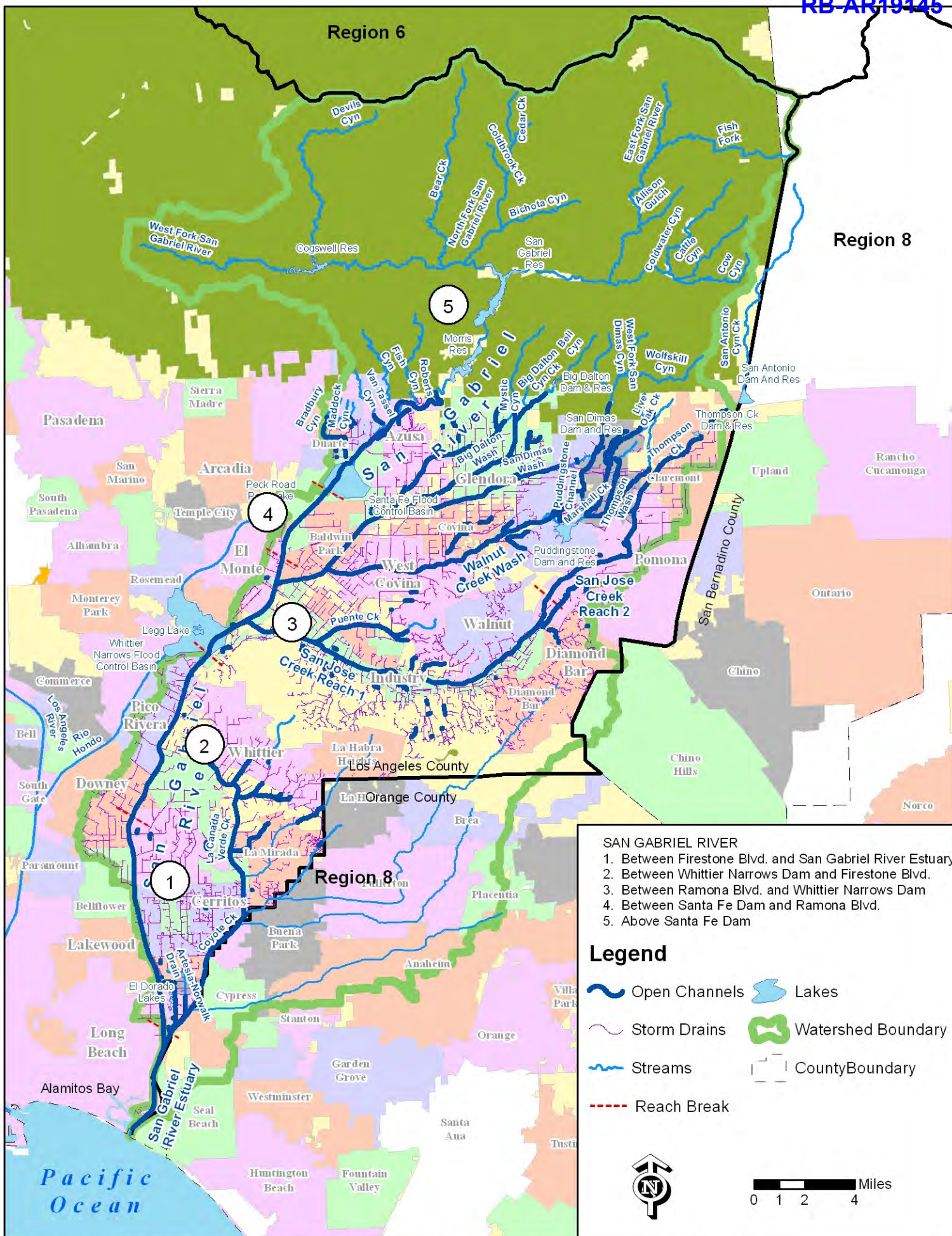


Figure C-4: Los Angeles River Watershed Management Area Flow Schematic.



- SAN GABRIEL RIVER**
1. Between Firestone Blvd. and San Gabriel River Estuary
 2. Between Whittier Narrows Dam and Firestone Blvd.
 3. Between Ramona Blvd. and Whittier Narrows Dam
 4. Between Santa Fe Dam and Ramona Blvd.
 5. Above Santa Fe Dam

Legend

- Open Channels
- Lakes
- Storm Drains
- Watershed Boundary
- Streams
- County Boundary
- Reach Break



0 1 2 4 Miles

Figure C-5: San Gabriel River Watershed Management Area Flow Schematic.

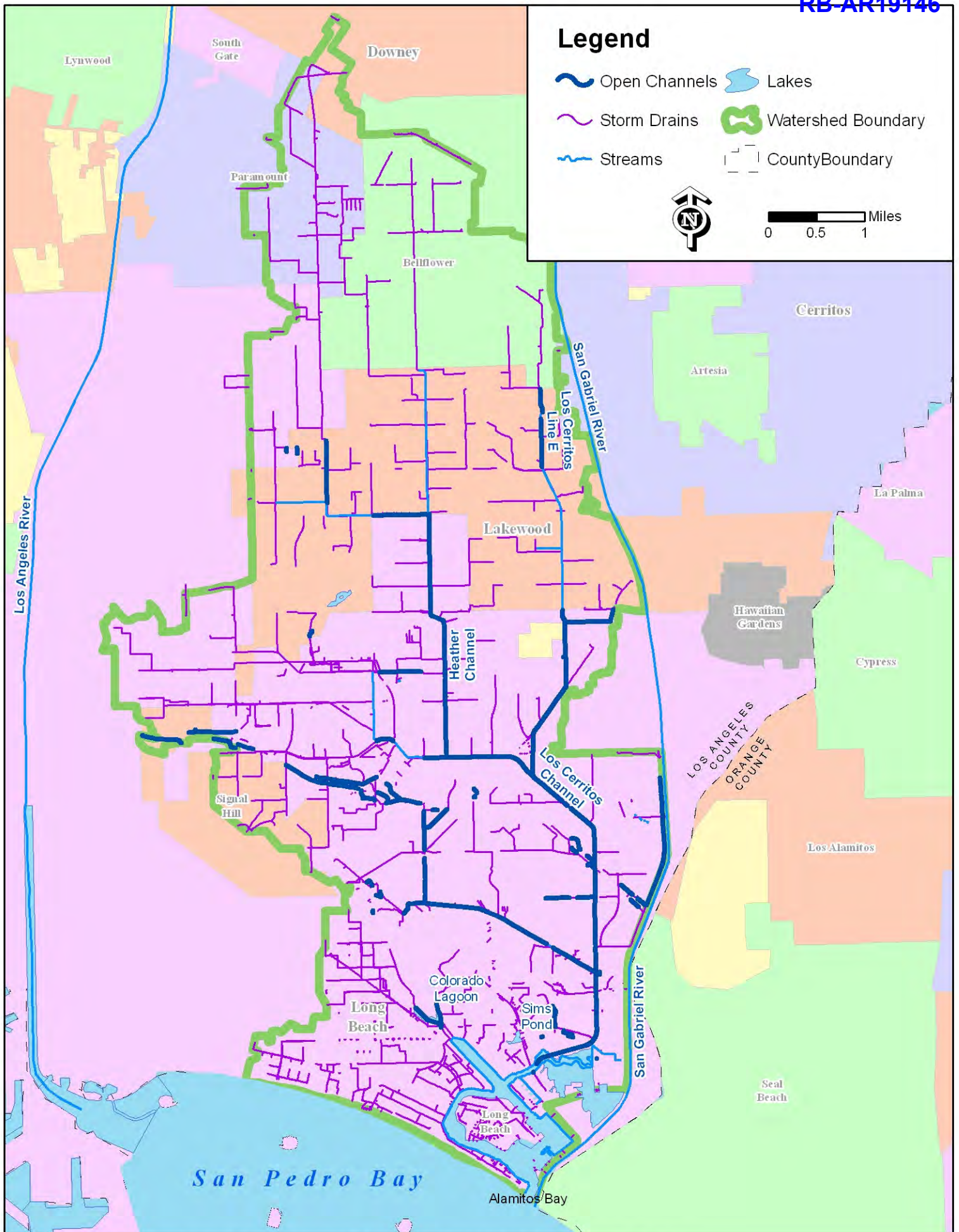


Figure C-6: Los Cerritos Channel and Alamitos Bay Watershed Management Area Flow Schematic.

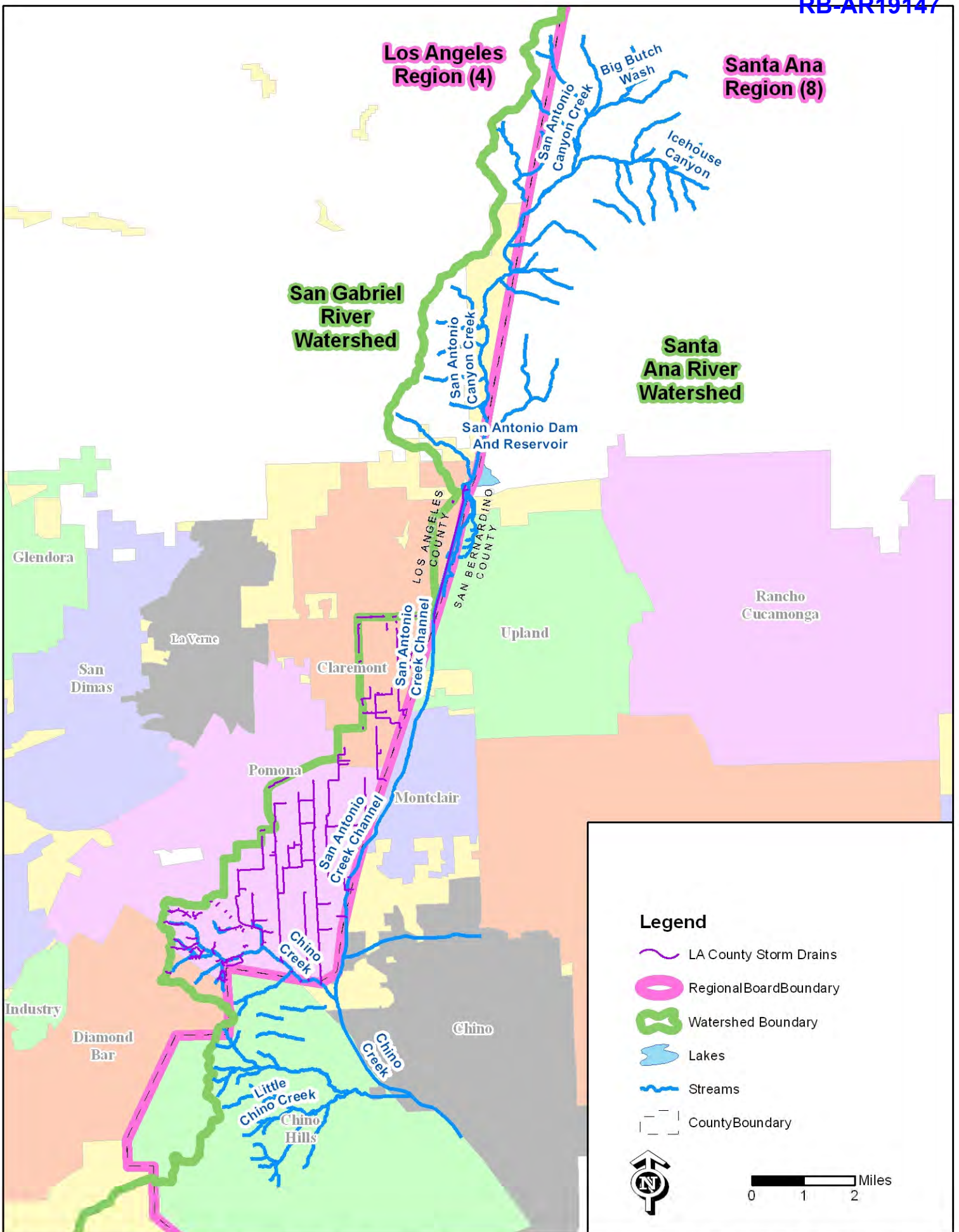


Figure C-7: Middle San Antonio Creek Subwatershed Flow Schematic.

ATTACHMENT D – STANDARD PROVISIONS**I. STANDARD PROVISIONS – PERMIT COMPLIANCE****A. Duty to Comply**

1. Dischargers must comply with all of the terms, requirements, and conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act, its regulations, and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; denial of a permit renewal application; or a combination thereof [40 CFR section 122.41(a); California Water Code sections 13261, 13263, 13263, 13265, 13268, 13300, 13301, 13304, 13340, 13350, 13385].
2. Dischargers must comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement [40 CFR section 122.41(a)(1)].

B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order [40 CFR section 122.41(c)].

C. Duty to Mitigate

Dischargers shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment [40 CFR section 122.41(d)].

D. Proper Operation and Maintenance

Dischargers shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Permittee only when necessary to achieve compliance with the conditions of this Order [40 CFR section 122.41(e)].

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E. Property Rights

1. This Order does not convey any property rights of any sort, or any exclusive privileges [40 CFR section 122.41(g)].
2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations [40 CFR section 122.5(c)].

F. Inspection and Entry

Dischargers shall allow the Regional Water Board, State Water Board, USEPA, and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to [33 U.S.C. section 1318(a)(4)(B); 40 CFR section –122.41(i); California Water Code sections 13267 and 13383]:

1. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order [33 U.S.C. section 1318(a)(4)(B)(i); 40 CFR section 122.41(i)(1); California Water Code sections 13267 and 13383];
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order [33 U.S.C. section 1318(a)(4)(B)(ii); 40 CFR section 122.41(i)(2); California Water Code sections 13267 and 13383];
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order [33 U.S.C. section 1318(a)(4)(B)(ii); 40 CFR section 122.41(i)(3); California Water Code sections 13267 and 13383]; and
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the California Water Code, any substances or parameters at any location [33 U.S.C. section 1318(a)(4)(B)(ii); 40 CFR section 122.41(i)(4); California Water Code sections 13267 and 13383].

G. Bypass

1. Definitions
 - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility [40 CFR section 122.41(m)(1)(i)].
 - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does

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not mean economic loss caused by delays in production [40 CFR section 122.41(m)(1)(ii)].

2. *Bypass not exceeding limitations.* Dischargers may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is also for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below [40 CFR section 122.41(m)(2)].
3. *Prohibition of bypass.* Bypass is prohibited, and the Regional Water Board may take enforcement action against a Permittee for bypass, unless [40 CFR section 122.41(m)(4)(i)]:
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage [40 CFR section 122.41(m)(4)(i)(A)];
 - c. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance [40 CFR section 122.41(m)(4)(i)(B)]; and
 - d. The Permittee submitted notices to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below [40 CFR section 122.41(m)(4)(i)(C)].
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above [40 CFR section 122.41(m)(4)(ii)].
5. Notice
 - a. *Anticipated bypass.* If a Permittee knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass [40 CFR section 122.41(m)(3)(i)].
 - b. *Unanticipated bypass.* Dischargers shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice) [40 CFR section 122.41(m)(3)(ii)].

H. Upset

“Upset” means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include

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noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation [40 CFR section 122.41(n)(1)].

1. *Effect of an upset.* An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review [40 CFR section 122.41(n)(2)].
2. *Conditions necessary for a demonstration of upset.* A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that [40 CFR section 122.41(n)(3)]:
 - a. An upset occurred and that the Permittee can identify the cause(s) of the upset [40 CFR section 122.41(n)(3)(i)];
 - b. The permitted facility was, at the time, being properly operated [40 CFR section 122.41(n)(3)(ii)];
 - c. The Permittee submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) [40 CFR section 122.41(n)(3)(iii)]; and
 - d. The Permittee complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above [40 CFR section 122.41(n)(3)(iv)].
3. *Burden of proof.* In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof [40 CFR section 122.41(n)(4)].

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by a Permittee for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition [40 CFR section 122.41(f)].

B. Duty to Reapply

If a Permittee wishes to continue an activity regulated by this Order after the expiration date of this Order, the Permittee must apply for and obtain a new permit [40 CFR section 122.41(b)].

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C. Transfers

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Permittee and incorporate such other requirements as may be necessary under the CWA and the California Water Code [40 CFR sections 122.41(l)(3) and 122.61].

III. STANDARD PROVISIONS – MONITORING

- A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity [40 CFR section 122.41(j)(1)].
- B. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136 for the analysis of pollutants unless another test procedure is required under 40 CFR subchapters N or O or is otherwise specified in this Order for such pollutants [40 CFR sections 122.41(j)(4) and 122.44(i)(1)(iv)].

IV. STANDARD PROVISIONS – RECORDS

- A. Except for records of monitoring information required by this Order related to the Permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), the Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time [40 CFR section 122.41(j)(2)].
- B. Records of monitoring information shall include:
 1. The date, exact place, and time of sampling or measurements [40 CFR section 122.41(j)(3)(i)];
 2. The individual(s) who performed the sampling or measurements [40 CFR section 122.41(j)(3)(ii)];
 3. The date(s) analyses were performed [40 CFR section 122.41(j)(3)(iii)];
 4. The individual(s) who performed the analyses [40 CFR section 122.41(j)(3)(iv)];
 5. The analytical techniques or methods used [40 CFR section 122.41(j)(3)(v)]; and
 6. The results of such analyses [40 CFR section 122.41(j)(3)(vi)].
- C. Claims of confidentiality for the following information will be denied [40 CFR section 122.7(b)]:

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1. The name and address of any permit applicant or Permittee [40 CFR section 122.7(b)(1)]; and
2. Permit applications and attachments, permits, and effluent data [40 CFR section 122.7(b)(2)].

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

Dischargers shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, Dischargers shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order [40 CFR section 122.41(h)]-; [~~California Water Code sections 13267 and 13383~~].

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below [40 CFR section 122.41(k)(1)].
2. All applications submitted to the Regional Water Board shall be signed by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer includes: (i) the chief executive officer of the agency (e.g., Mayor), or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., City Manager, Director of Public Works, City Engineer, etc.).[40 CFR section 122.22(a)(3)].
3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above [40 CFR section 122.22(b)(1)];
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) [40 CFR section 122.22(b)(2)]; and

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- c. The written authorization is submitted to the Regional Water Board [40 CFR section 122.22(b)(3)].
4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative [40 CFR section 122.22(c)].
 5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.” [40 CFR section 122.22(d)].

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order [40 CFR section 122.2241(l)(4)].
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices [40 CFR section 122.41(l)(4)(i)].
3. If a Permittee monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board [40 CFR section 122.41(l)(4)(ii)].
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified by the Regional Water Board in this Order [40 CFR section 122.41(l)(4)(iii)].

D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be

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submitted no later than 14 days following each schedule date [40 CFR section 122.41(l)(5)].

E. Twenty-Four Hour Reporting

1. Dischargers shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Permittee becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance [40 CFR section 122.41(l)(6)(i)].
2. The following shall be included as information that must be reported within 24 hours under this paragraph [40 CFR section 122.41(l)(6)(ii)]:
 - a. Any unanticipated bypass that exceeds any effluent limitation in this Order [40 CFR sections 122.41(l)(6)(ii)(A) and 122.41(g)].
 - b. Any upset that exceeds any effluent limitation in this Order [40 CFR section 122.41(l)(6)(ii)(B)].
 - c. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Regional Water Board in this Order to be reported within 24 hours [40 CFR section (l)(6)(ii)(C) and 122.44(g)].
3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours [40 CFR section 122.41(l)(6)(iii)].

F. Planned Changes

Dischargers shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when [40 CFR section 122.41(l)(1)]:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR section 122.29(b) [40 CFR section 122.41(l)(1)(i)]; or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order [40 CFR section 122.41(l)(1)(ii)].

The alteration or addition results in a significant change in the Permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of

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permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan [40 CFR section 122.41(l)(1)(iii)].

G. Anticipated Noncompliance

Dischargers shall give advance notice to the Regional Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements [40 CFR section 122.41(l)(2)].

H. Other Noncompliance

Dischargers shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above [40 CFR section 122.41(l)(7)].

I. Other Information

When a Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or USEPA, the Permittee shall promptly submit such facts or information [40 CFR section 122.41(l)(8)].

VI. STANDARD PROVISIONS – ENFORCEMENT

- A. The Regional Water Board and State Water Board is authorized to enforce the terms of this Order under several provisions of the California Water Code, including, but not limited to, sections 13268, 13385, 13386, and 13387.
- B. The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the CWA is subject to a civil penalty not to exceed \$25,000 per day for each violation. The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the CWA, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the CWA, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not

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more than \$100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions [40 CFR section 122.41(a)(2)] [California Water Code sections 13385 and 13387].

- C. Any person may be assessed an administrative penalty by the Regional Water Board for violating section 301, 302, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000 [40 CFR section 122.41(a)(3)].
- D. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both [40 CFR section 122.41(j)(5)].
- E. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both [40 CFR section 122.41(k)(2)].

VII. ADDITIONAL STANDARD CONDITIONS APPLICABLE TO SPECIFIC CATEGORIES OF NPDES PERMITS [40 CFR section 122.42]

- A. *Municipal separate storm sewer systems.* The operator of a large or medium MS4 or a municipal separate storm sewer that has been designated by the Regional Water Board or USEPA under 40 CFR section 122.26(a)(1)(v) must submit an annual report by the anniversary of the date of the issuance of the permit for such MS4. The report shall include [40 CFR section 122.42(c)]:

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1. The status of implementing the components of the storm water management program that are established as permit conditions [40 CFR section 122.42(c)(1)];
 2. Proposed changes to the storm water management programs that are established as permit condition. Such proposed changes shall be consistent with 40 CFR section 122.26(d)(2)(iii) [40 CFR section 122.42(c)(2)]; and
 3. Revisions, if necessary, to the assessment of controls and the fiscal analysis reported in the permit application under 40 CFR section 122.26(d)(2)(iv) and (d)(2)(v) [40 CFR section 122.42(c)(3)];
 4. A summary of data, including monitoring data, that is accumulated throughout the reporting year [40 CFR section 122.42(c)(4)];
 5. Annual expenditures and budget for year following each annual report [40 CFR section 122.42(c)(5)];
 6. A summary describing the number and nature of enforcement actions, inspections, and public education programs [40 CFR section 122.42(c)(6)];
 7. Identification of water quality improvements or degradation [40 CFR section 122.42(c)(7)];
- B. Storm water discharges.** The initial permits for discharges composed entirely of storm water issued pursuant to 40 CFR section 122.26(e)(7) shall require compliance with the conditions of the permit as expeditiously as practicable, but in no event later than three years after the date of issuance of the permit. [40 CFR section 122.42(d)].

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

LOS ANGELES REGION

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576 - 6600 • Fax (213) 576 - 6640
<http://www.waterboards.ca.gov/losangeles>

MONITORING AND REPORTING PROGRAM - No. TBD

FOR

**ORDER R4-2012-XXXX
NPDES PERMIT NO. CAS004001**

**WASTE DISCHARGE REQUIREMENTS
FOR MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) DISCHARGES
WITHIN THE COASTAL WATERSHEDS OF LOS ANGELES COUNTY FLOOD
CONTROL DISTRICT, INCLUDING THE COUNTY OF LOS ANGELES, AND THE
INCORPORATED CITIES THEREIN, EXCEPT THOSE DISCHARGES ORIGINATING
FROM THE CITY OF LONG BEACH MS4**

Month Date, 2012

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I. MONITORING AND REPORTING PROGRAM (MRP)

Section 308(a) of the federal Clean Water Act and Sections 122.41(h), (i)-(l), 122.44(i), and 122.48 of Title 40 of the Code of Federal Regulations requires that all National Pollutant Discharge Elimination System (NPDES) permits specify monitoring and reporting requirements. Federal regulations applicable to large and medium MS4s also specify additional monitoring and reporting requirements. (40 C.F.R. §§ 122.26(d)(2)(i)(F) & (d)(2)(iii)(D), 122.42(c).) California Water Code sections 13267 and 13383 further authorize the California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board) to establish monitoring, inspection, entry, reporting, and recordkeeping requirements require technical and monitoring reports. This MRP establishes monitoring, and reporting, and recordkeeping requirements that implement the federal and California laws and/or regulations.

II. PURPOSE AND SCOPE**A. Primary Objectives**

The primary objectives of the Monitoring Program are to:

1. Assess the chemical, physical, and biological impacts of discharges from the municipal storm water sewer system (MS4) on receiving waters.
2. Assess compliance with receiving water limitations and water quality-based effluent limitations (WQBELs) established to implement Total Maximum Daily Load (TMDL) wet weather and dry weather wasteload allocations (WLAs).
3. Characterize pollutant loads in MS4 discharges.
4. Identify sources of pollutants in MS4 discharges.
5. Measure and improve the effectiveness of pollutant controls implemented under this Order.

B. Purpose

The results of the monitoring requirements outlined below shall be used to refine control measures for the reduction of pollutant loading and the protection and enhancement of the beneficial uses of the receiving waters in Los Angeles County.

C. Provision for Integrated Approach

The Monitoring Program provides flexibility to allow Permittees to develop an integrated monitoring program to address all of the monitoring requirements of this Order and other monitoring obligations or requirements in a cost efficient and effective manner.

D. Provision for a Coordinated Integrated Approach

The Monitoring Program provides flexibility to allow Permittees to coordinate monitoring efforts on a watershed or subwatershed basis to leverage monitoring resources in an effort to increase cost-efficiency and effectiveness and to closely

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align monitoring with TMDL monitoring requirements and Watershed Management Programs.

E. Monitoring Program Elements

The Monitoring Program shall include the following elements:

1. **Receiving water monitoring** shall be performed at previously designated mass emission stations and/or at TMDL receiving water compliance points, as designated in Regional Water Board Executive Officer approved TMDL ~~Coordinated Monitoring Plans (CMPs)~~ Monitoring Plans (see Table E-1 for a list of approved TMDL ~~CMPs~~ Monitoring Plans). The objectives of the receiving water monitoring include the following:
 - a. Determine whether the receiving water limitations are being achieved,
 - b. Assess trends in pollutant concentrations over time, or during specified conditions,
 - c. Determine whether the designated beneficial uses are fully supported as determined by water chemistry, as well as aquatic toxicity and bioassessment monitoring.
2. **Storm water outfall based monitoring**; including TMDL monitoring requirements specified in approved TMDL ~~CMPs~~ Monitoring Plans (see Table E-1). The objectives of the storm water outfall based monitoring program include the following:
 - a. Determine the quality of a Permittee's discharge relative to municipal action levels, as described in Attachment G of this Order,
 - b. Determine whether a Permittee's discharge is in compliance with applicable ~~wet weather~~ storm water WQBELs derived from TMDL WLAs,
 - c. Determine whether a Permittee's discharge causes or contributes to an exceedance of receiving water limitations.
3. **Non-storm water outfall based monitoring**; including TMDL monitoring requirements specified in approved TMDL ~~CMPs~~ Monitoring Plans (see Table E-1). The objectives of the non-storm water outfall based monitoring program include the following:
 - a. Determine whether a Permittee's discharge is in compliance with applicable ~~dry weather~~ non-storm water WQBELs derived from TMDL WLAs,
 - b. Determine whether a Permittee's discharge exceeds non-storm water action levels, as described in Attachment G of this Order,
 - c. Determine whether a Permittee's discharge contributes to or causes an exceedance of receiving water limitations,
 - d. Assist a Permittee in identifying illicit discharges as described in Part VI.D.9-10 of this Order.

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- 4. New Development/Re-development effectiveness ~~monitoring~~ tracking.**
The objectives of best management practices (BMP) effectiveness ~~monitoring~~ tracking is to ~~determine~~ track whether the conditions in the building permit issued by the Permittee are implemented to ensure the volume of storm water associated with the design storm is retained on-site as required by Part VI.D.6Z.c.i. of this Order, and as conditioned in the building permit issued by the Permittee.
- 5. Regional studies** are required to further characterize the impact of the MS4 discharges on the beneficial uses of the receiving waters. Regional studies shall include the Southern California Stormwater Monitoring Coalition (SMC) Regional Watershed Monitoring Program (bioassessment), ~~sediment monitoring for Pyrethroid pesticides,~~ and special studies as specified in approved TMDLs (see Section XIX TMDL Reporting, below).

III. GENERAL MONITORING AND REPORTING REQUIREMENTS

- A.** Monitoring shall be conducted in accordance with the requirements specified in Attachment D to this Order (Part III, Standard Provisions - Monitoring).
- B.** Records of monitoring information shall include information required under Attachment D to this Order (Part IV, Standard Provisions - Records).
- C.** All applications, reports, plans, or other information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Attachment D to this Order (Part V.B, Standard Provisions - Reporting, Signatory and Certification Requirements).
- D.** Monitoring results shall be reported in accordance with the requirements specified in Attachment D to this Order (Part V.C, Standard Provisions - Reporting, Monitoring Reports).
- E.** All monitoring and reporting shall be conducted in accordance with the Standard Monitoring Provisions specified in Part XIV of this MRP.
- F. Sampling Methods**
1. Sampling methods shall be fully described in each Permittee's Integrated Monitoring Program (IMP) or Coordinated Integrated Monitoring Program (CIMP) and according to the provisions of the Standard Provisions for Monitoring described in Attachment D to this Order and Part XIV of this MRP.
 2. Grab samples shall be taken ~~only~~ for constituents that are required to be collected as such (e.g., pathogen indicator bacteria, oil and grease, cyanides, and volatile organics); in instances where grab samples are generally expected to be sufficient to characterize water quality conditions (primarily dry weather); and where the sample location limits Permittees' ability to install an automated sampler, as provided for in an approved IMP or CIMP.

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- ~~3. Sampling and monitoring methods for trash shall be conducted in accordance with the applicable requirements specified in Part VI.E.5 of this Order.~~
3. At a minimum, a sufficient volume of sample must be collected to perform all of the required biological and chemical tests, including TIEs where aquatic toxicity is observed during the sample event.
- ~~4. Sampling and monitoring methods for trash shall be conducted in accordance with the applicable requirements specified in Part VI.E.5 of this Order.~~
- 4.
5. Flow may be estimated using USEPA methods at receiving water monitoring stations where flow measuring equipment is ~~rements are~~ not in place.
- ~~5.6.~~ Flow may be estimated for storm water outfall monitoring based on drainage area, impervious cover, and precipitation data as approved in an IMP or CIMP.

G. Analytical Procedures

1. Suspended-Sediment Concentration (SSC) shall be analyzed per American Society for Testing and Materials (ASTM) Standard Test Method D-3977-97.
2. Monitoring methods for trash shall be conducted in accordance with the applicable requirements specified in Part VI.E.5 of this Order.
3. Aquatic toxicity shall be monitored in accordance with Part XI of this MRP.
4. All other parameters shall be analyzed according to the provisions of the Standard Provisions for Monitoring described in Attachment D to this Order and Part XIV of this MRP.

H. Reporting

- ~~1. Monitoring results submitted to the Regional Water Board shall include:~~
 - ~~a. Rain totals and hydrographs for monitoring events in both narrative and graphic formats.~~
 - ~~b. A narrative description of the date and duration of the storm event(s) sampled, rainfall estimates of the storm event that generated the sampled discharge and the duration between the storm event sampled and the end of the previous measurable storm event.~~

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2.1. Reporting requirements related to the monitoring of trash shall be conducted in accordance with Part VI.E.5.c of this Order.

3.2. Monitoring results submitted to the Regional Water Board shall be consistent with the requirements identified in Part XVIII.A.5 and Part XVIII.A.7 of this MRP.

IV. INTEGRATED MONITORING PROGRAMS

A. Integrated Monitoring Program (IMP)

1. Each Permittee may develop an Integrated Monitoring Program designed to satisfy the monitoring requirements of this Order.
2. The monitoring requirements contained in TMDL ~~CMPs~~ Monitoring Plans approved by the Executive Officer of the Regional Water Board are incorporated by reference into this MRP (See Table E-1 for a list of approved TMDL ~~CMPs~~ Monitoring Plans).
3. The Integrated Monitoring Program may leverage monitoring resources by selecting monitoring locations, parameters, or monitoring techniques that will satisfy multiple monitoring requirements.
4. Where appropriate ~~(e.g., dry weather outfall based screening program)~~, the Integrated Monitoring Program may develop and utilize alternative approaches to meet the Primary Objectives (Part II.A). ~~screening level monitoring strategies to avoid more costly analytical procedures if approved~~ Such alternative approaches shall be subject to public review and final approval by the Regional Water Board Executive Officer.
5. The requirements of an approved TMDL ~~CMP~~ Monitoring Plan may be modified by an IMP that is subsequently approved by the Executive Officer of the Regional Water Board.
6. At a minimum, the IMP must address all TMDL and Non-TMDL monitoring requirements of this Order, including receiving water monitoring, storm water outfall based monitoring, non-storm water outfall based monitoring, and regional water monitoring studies, except as provided in Parts IV.B.2 and 3 of this MRP.

B. Coordinated Integrated Monitoring Program (CIMP)

1. Benefits of the CIMP Approach

- a. The CIMP provides Permittees opportunities to increase the cost efficiency and effectiveness of the monitoring program. The greatest efficiency may be achieved when a CIMP is designed and implemented on a watershed basis.
- b. A CIMP may be employed to implement regional studies, where a single Permittee takes the lead in directing the study, and the other Permittees provide funding or in lieu services.

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2. Permittees are encouraged to coordinate their monitoring programs with other Permittees to develop and implement a CIMP. A CIMP may be developed to address one or more of the required monitoring elements (i.e., receiving water monitoring, outfall based monitoring, regional monitoring or special studies) and may be county-wide or limited to a single watershed, sub-watershed or defined jurisdictional boundary.
3. The requirements of an approved TMDL ~~CIMP~~ Monitoring Plan may be modified by an IMP or CIMP that is subsequently approved by the Executive Officer of the Regional Water Board.
4. A Permittee shall not be required to submit an IMP if all of the applicable monitoring requirements in this Order are addressed in a CIMP, to which the Permittee is a participant.
5. If the CIMP addresses some but not all of the applicable monitoring requirements required under this Order, then each Permittee shall submit an IMP that references the CIMP. The Permittees must describe how together, the IMP and CIMP, fulfill all of the applicable monitoring requirements contained in this Order.
- ~~5.6.~~ Where appropriate, the CIMP may develop and utilize alternative approaches to meet the Primary Objectives (Part II.A). Sufficient justification shall be provided in the CIMP for the alternative approach(es). Such alternative approaches shall be subject to public review and final approval by the Regional Water Board Executive Officer.

C. Schedule for Submitting the Monitoring Plan to the Regional Water Board and Conducting Outfall Screening

1. Within six (6) months after the effective date of this Order, each Permittee shall submit a letter of intent to the Executive Officer of the Regional Water Board describing whether it intends to follow an IMP or CIMP approach for each of the required monitoring plan elements.
2. Each Permittee not electing to develop a Watershed Management Program (WMP) shall submit an IMP plan addressing monitoring requirements that the Permittee intends to implement individually to the Executive Officer of the Regional Water Board within ~~twelve~~ nine (129) months after the effective date of this Order.
3. ~~The participating Permittees~~ electing to develop a WMP shall submit an IMP or CIMP plan and a letter of intent, signed by each of the participating Permittees, to the Executive Officer of the Regional Water Board concurrently with their draft WMP within 12 months after the effective date of this Order.
- ~~3.4.~~ Permittees electing to develop an enhanced WMP shall submit an IMP or CIMP plan to the Executive Officer of the Regional Water Board within 18 months after the effective date of this Order.
- 4.5. If upon finalization of the CIMP plan, a Permittee that has developed an IMP determines that its IMP plan must be revised to include monitoring

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requirements not covered under the final CIMP, the revised IMP plan shall be submitted to the Executive Officer of the Regional Water Board within 60 days after approval of the CIMP plan by the Executive Officer of the Regional Water Board.

5.6. Monitoring shall commence within 30 days after approval of the IMP₁ or within 90 days after approval of the CIMP₁ plan by the Executive Officer of the Regional Water Board.

6.7. If a Permittee elects not to develop or participate in an IMP or CIMP, monitoring shall be conducted on a jurisdictional basis per the requirements contained in Parts V through XIII and XIX of this MRP, beginning six (6) months after the effective date of this Order.

7.8. Monitoring requirements pursuant to Order No. 01-182 and Monitoring and Reporting Program CI 6948, and pursuant to approval TMDL monitoring plans identified in Table E-1, shall remain in effect until the Executive Officer of the Regional Water Board approves a Permittee(s) IMP and/or CIMP plan(s).

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V. TMDL MONITORING PLANS

Table E-1. Approved TMDL Monitoring Plans by Watershed Management Area

TMDL	Comment	Date of Final Plan	Regional Water Board Approval Date
Santa Clara River Watershed Management Area			
Santa Clara River Nitrogen Compounds TMDL	Monitoring Plan was due March 23, 2005.	---	---
Upper Santa Clara River Chloride TMDL	Monitoring Plan was not required.	N/A	N/A
Lake Elizabeth, Munz Lake, and Lake Hughes Trash TMDL (Lake Elizabeth only)	The County of Los Angeles Trash TMDL Monitoring and Reporting Plan for Lake Elizabeth, Munz Lake, and Lake Hughes	June 25, 2009	March 25, 2009
Santa Clara River Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL	Monitoring Plan is due on March 21, 2013.	---	---
Santa Monica Bay Watershed Management Area			

TMDL	Comment	Date of Final Plan	Regional Water Board Approval Date
Santa Monica Bay Beaches Bacteria TMDL (Wet and Dry)	Santa Monica Bay Beaches Bacterial TMDLs Coordinated Shoreline Monitoring Plan	April 7, 2004	January 8, 2004
Santa Monica Bay Nearshore and Offshore Debris TMDL	Monitoring Plan is due on September 20, 2012.	---	---
Santa Monica Bay TMDL for DDTs and PCBs	USEPA Established TMDL	N/A	N/A
Malibu Creek Subwatershed			
Malibu Creek and Lagoon Bacteria TMDL	Malibu Creek and Lagoon Bacteria TMDL Compliance Monitoring Plan	February 25, 2008	April 8, 2008
Malibu Creek Watershed Trash TMDL	Malibu Creek Watershed Trash Monitoring and Reporting Plan (TMRP)	April 28, 2010	Has not been approved.
Malibu Creek Watershed Nutrients TMDL	USEPA Established TMDL	N/A	N/A
Ballona Creek Subwatershed			
Ballona Creek Trash TMDL	Monitoring Plan was not required.	N/A	N/A
Ballona Creek Estuary Toxic Pollutants TMDL	Ballona Creek Metals TMDL and Ballona Creek Estuary Toxic Pollutants TMDL Coordinated Monitoring Plan	May 4, 2009	June 25, 2009
Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL	Ballona Creek, Ballona Estuary, & Sepulveda Channel Bacteria TMDL Coordinated Monitoring Plan	January 29, 2009	December 16, 2008

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TMDL	Comment	Date of Final Plan	Regional Water Board Approval Date
Ballona Creek Metals TMDL	Ballona Creek Metals TMDL and Ballona Creek Estuary Toxic Pollutants TMDL Coordinated Monitoring Plan	May 4, 2009	June 25, 2009
Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation	USEPA Established TMDL	N/A	N/A
Marina del Rey Subwatershed			
Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL	Marina Del Rey Harbor Mothers' Beach and Back Basins Bacterial TMDL Coordinated Monitoring Plan	June 25, 2007	February 1, 2007
Marina del Rey Harbor Toxic Pollutants TMDL	Marina Del Rey Harbor Toxic Pollutants Total Maximum Daily Load Coordinated Monitoring Plan	March 31, 2008	March 3, 2009
Dominguez Channel and Greater Harbors Waters Watershed Management Area			
Los Angeles Harbor Bacteria TMDL (Inner Cabrillo Beach and Main Ship Channel)	Monitoring Plan was not required.	N/A	N/A
Machado Lake Trash TMDL	Trash Monitoring & Reporting Plan: Machado Lake Trash TMDL	September 5, 2008	December 9, 2008
	City of Rolling Hills Trash Monitoring and Reporting Plan Machado Lake Trash TMDL	September 5, 2008	December 9, 2008

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TMDL	Comment	Date of Final Plan	Regional Water Board Approval Date
Machado Lake Nutrient TMDL	Palos Verdes Peninsula Coordinated Monitoring Plan In Compliance with the Machado Lake Nutrient Total Maximum Daily Load	February 1, 2011	December 14, 2010
	Machado Lake Nutrients TMDL Lake Water Quality Management Plan for City of Los Angeles	August 18, 2010	February 14, 2011
	Machado Lake Nutrient TMDL Monitoring and Reporting Program Plan for the City of Carson	March 27, 2012	March 7, 2012
	Machado Lake Multipollutant TMDL Monitoring and Reporting Program for the Unincorporated Areas of Los Angeles County within the Machado Lake Watershed	September 12, 2011	April 25, 2012
	Monitoring Plans were due from the City of Lomita on April 25, 2011, City of Redondo Beach on March 11, 2010, and City of Torrance on May 16, 2012.	---	---
Machado Lake Pesticides and PCBs TMDL	Monitoring Plan is due on September 20, 2012 ¹ .	---	---

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¹ The deadline for Permittees assigned both WLAs and LAs to submit one document to address both WLA and LA monitoring requirements and implementation activities shall be September 20, 2013.

TMDL	Comment	Date of Final Plan	Regional Water Board Approval Date
Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL	Monitoring Plan is due on November 23, 2013.	---	---
Los Angeles River Watershed Management Area			
Los Angeles River Watershed Trash TMDL	Monitoring Plan was not required.	N/A	N/A
Los Angeles River Nitrogen Compounds and Related Effects TMDL	Monitoring Plan was due on March 23, 2005.	---	---
Los Angeles River and Tributaries Metals TMDL	Los Angeles River Metals TMDL Coordinated Monitoring Plan	March 25, 2008	April 11, 2008
Los Angeles River Watershed Bacteria TMDL	Monitoring Plan is due on March 23, 2013.	---	---
Legg Lake Trash TMDL	Legg Lake Trash Monitoring & Reporting Plan: Legg Lake Trash TMDL	September 5, 2008	March 25, 2009
Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL	USEPA Established TMDL	N/A	N/A
Los Angeles Area Lakes TMDLs (Lake Calabastas, Echo Park Lake, Legg Lake and Peck Road Park Lake)	USEPA Established TMDL	N/A	N/A
San Gabriel River Watershed Management Area			
San Gabriel River and Impaired Tributaries Metals and Selenium TMDL	USEPA Established TMDL	N/A	N/A

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TMDL	Comment	Date of Final Plan	Regional Water Board Approval Date
Logg Lake Trash TMDL	Logg Lake Trash Monitoring & Reporting Plan: Logg Lake Trash TMDL	September 5, 2008	March 25, 2009
Los Angeles Area Lakes TMDLs (Logg Lake and Puddingstone Reservoir)	USEPA Established TMDL	N/A	N/A
Los Cerritos Channel and Alamitos Bay Watershed Management Area			
Los Cerritos Channel Metals TMDL	USEPA Established TMDL	N/A	N/A
Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL	Colorado Lagoon TMDL Monitoring Plan (CLTMP)	January 28, June 15, 2012	Has not been approved. August 23, 2012
Middle Santa Ana River Watershed Management Area			
Middle Santa Ana River Watershed Bacteria Indicator TMDL	Monitoring Plan was due on November 16, 2007.	---	---

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VI. RECEIVING WATER MONITORING

A. IMP Receiving Water Monitoring Requirements

1. ~~All~~ The IMP plans must contain the following information for receiving water monitoring:
 - a. Declaration of whether receiving water monitoring is conducted under an IMP, CIMP or both.
 - b. If receiving water monitoring is performed under the IMP, the plan must contain the following information:
 - i. A map (preferably GIS) identifying the proposed receiving water monitoring stations for both dry weather and wet weather monitoring.
 - ii. An explanation of how and why monitoring at the proposed locations will provide representative measurement of the effects of the Permittee’s MS4 discharges on the receiving water.

- iii. Identification of applicable TMDLs and TMDL compliance points, based on approved TMDL ~~GMPs~~ Monitoring Plans and/or as identified in the Basin Plan for the applicable TMDLs.
- iv. A description of how the Permittee is fulfilling its obligations for TMDL receiving water monitoring under this IMP, CIMP or other monitoring plans.
- v. A description of how the Permittee is contributing to the monitoring of mass emission stations or a discussion of why monitoring at mass emission stations is not being supported.

B. CIMP Receiving Water Monitoring Requirements

1. The CIMP plan must contain the following information for receiving water monitoring:
 - a. A list of the participating Permittees.
 - b. A map (preferably GIS) delineating the geographic boundaries of the monitoring plan including the receiving waters, the MS4 catchment drainages and outfalls, subwatershed boundaries (i.e., HUC 12), political boundaries, land use, and the –proposed receiving water monitoring stations for both dry weather and wet weather receiving water monitoring.
 - c. An explanation of how and why monitoring at the proposed locations will provide representative measurement of the effects of the MS4 discharges on the receiving water.
2. TMDLs
 - a. A list of applicable TMDLs and TMDL compliance points, based on approved TMDL ~~GMPs~~ Monitoring Plans and/or as identified in the Basin Plan for the applicable TMDLs.
 - b. Identification of the proposed receiving water monitoring stations that fulfill the TMDL ~~GMP~~ Monitoring Plan(s) requirements.
 - b-c. Shoreline Monitoring Stations monitored pursuant to a bacteria TMDL. Sampling for bacterial indicators (total coliform, fecal coliform (or E. coli), and enterococcus) at shoreline monitoring locations addressed by a TMDL shall be conducted 5 times per week at sites subject to the reference system criterion for allowable exceedance days, and weekly at sites subject to the antidegradation criterion for allowable exceedance days.
3. Mass Emission Stations
 - a. Location of mass emission stations,
 - b. Description of monitoring at mass emission stations or justification of why monitoring at the mass emission stations will be discontinued.

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C. Minimum Wet Weather Receiving Water Monitoring Requirements

1. The IMP ~~and/or~~ CIMP shall incorporate the following minimum requirements for monitoring the receiving water during wet weather conditions:
 - a. The receiving water shall be monitored a minimum of three times per year for all parameters except aquatic toxicity, which must be monitored at least twice per year, or more frequently if required by applicable TMDL ~~GMPs~~ Monitoring Plans.
 - b. Monitoring shall be performed in the receiving water during wet weather conditions, defined for the purposes of this monitoring program as follows:
 - i. When the receiving water is the Santa Monica Bay or other ocean or estuarine~~y~~ water body, wet weather occurs during a storm event of greater than or equal to 0.1 inch of precipitation, as measured from at least 50 percent of the Los Angeles County controlled rain gauges within the watershed, or based on an alternative precipitation threshold as provided for in an approved IMP or CIMP.
 - ii. When the receiving water body is a river, stream or creek, wet weather shall be defined as when the flow within the receiving water is at least 20 percent greater than the base flow or an alternative threshold as provided for in an approved IMP or CIMP, or as defined by effective TMDLs within the watershed.
 - iii. Monitoring shall occur during wet weather conditions, including targeting the first significant rain event of the storm year following the criteria below, and at least two additional wet weather events within the same wet weather season. Permittees shall target the first storm event of the storm year with a predicted rainfall of at least 0.25 inch at a seventy percent probability of rainfall at least 24 hours prior to the event start time. Permittees shall target subsequent storm events that forecast sufficient rainfall and runoff to meet program objectives and site specific study needs. Sampling events shall be separated by a minimum of three days of dry conditions (less than 0.1 inch of rain each day).
 - c. Receiving water monitoring shall begin ~~within 6 hours~~ as soon as possible after storm water outfall-based monitoring, in order to be reflective of potential impacts from MS4 discharges ~~unless Permittees can demonstrate that a longer time period is reflective of the rain event.~~
 - d. At a minimum, the following parameters shall be monitored unless a surrogate pollutant has been approved by the Executive Officer of the Regional Water Board.
 - i. Flow
 - ii. Pollutants assigned a receiving water limitation derived from TMDL WLAs (See Attachments L-R of this Order),

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- iii. Other pollutants identified on the CWA section 303(d) List for the receiving water or downstream receiving waters,
 - iv. Total Suspended Solids (TSS) and Suspended-Sediment Concentration (SSC) if the receiving water is listed on the CWA section 303(d) list for sedimentation, siltation or turbidity,²
 - v. Field measurements applicable to inland freshwater bodies only: hardness, pH, dissolved oxygen, temperature, and specific conductivity,
 - vi. Aquatic Toxicity (twice per year, once during first storm event of the storm year as specified above).
- vi.e. Additionally, the screening parameters in Table E-2 shall be monitored in the first year of monitoring during the first significant rain event of the storm year. If a parameter is not detected at the Method Detection Limit (MDL) for its respective test method or the result is below the lowest applicable water quality objective, and is not otherwise identified in subparts d.i.-d.vi. above, it need not be further analyzed. If a parameter is detected exceeding the lowest applicable water quality objective then the parameter shall be analyzed for the remainder of the Order during wet weather at the receiving water monitoring station where it was detected.

D. Minimum Dry Weather Receiving Water Monitoring

1. The IMP and/or CIMP plan shall incorporate the following minimum requirements for monitoring the receiving water during dry weather conditions:
 - a. The receiving water shall be monitored a minimum of two times per year for all parameters, or more frequently if required by applicable TMDL CMPs Monitoring Plans. One of the monitoring events shall be during the month with the historically lowest instream flows, or where instream flow data are not available, during the historically driest month.
 - b. Monitoring shall be performed in the receiving water during dry weather conditions, defined as follows:
 - i. When the receiving water is the Santa Monica Bay or other ocean or estuary water body, dry weather occurs on days with less than 0.1 inch of rain and those days not less than three days after a rain event of 0.1 inch or greater within the watershed, as measured from at least 50 percent of Los Angeles County controlled rain gauges within the watershed, or an alternative criterion as provided for in an approved IMP or CIMP.

² Gray, John, R., G. Douglas Glysson, Lisa M. Turcios, and Gregory E. Schwarz. 2000. *Comparability of Suspended-Sediment Concentration and Total Suspended Solids Data*. United States Geological Survey. Water Resources Investigations Report 00-4191. August 2000.

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- ii. When the receiving water body is a river, stream or creek, dry weather shall be defined as when the flow is less than 20 percent greater than the base flow or as defined by effective TMDLs within the watershed, or an alternative criterion as provided for in an approved IMP or CIMP.
- c. At a minimum the following parameters shall be monitored during dry weather conditions, unless a surrogate pollutant has been approved by the Executive Officer of the Regional Water Board:
 - i. Flow
 - ii. Pollutants assigned receiving water limitations derived from TMDL dry weather WLAs,
 - iii. Other pollutants identified on the CWA section 303(d) List for the receiving water or downstream receiving waters,
 - ~~iv. Pollutants assigned non-storm water action levels in Attachment G,~~
 - ~~v.iv.~~ TSS and hardness, when metals are monitored,
 - ~~vi.v.~~ Field measurements for monitoring of inland freshwater bodies: dissolved oxygen, pH, temperature, and specific conductivity,
 - ~~vi.~~ Aquatic Toxicity (~~twice~~ once per year, ~~once~~ during the month with the historically lowest flows).
- d. Additionally, the parameters in Table E-2 shall be monitored in the first year of monitoring during the critical dry weather event. If a parameter is not detected at the Method Detection Limit (MDL) for its respective test method or the result is below the lowest applicable water quality objective, and is not otherwise identified in subparts c.i.-c.iii. or c.v.-c.vii. above, it need not be further analyzed. If a parameter is detected exceeding the lowest applicable water quality objective then the parameter shall be analyzed for the remainder of the Order during dry weather at the receiving water monitoring station where it was detected.

Table E-2. Storm Water Monitoring Program’s Constituents with Associated Minimum Levels (MLs)³

CONSTITUENTS	MLs
CONVENTIONAL POLLUTANTS	mg/L
Oil and Grease	5
Total Phenols	0.1
Cyanide	0.005
pH	0 - 14
Temperature	N/A
Dissolved Oxygen	Sensitivity to 5 mg/L

³ For priority pollutants, MLs published in Appendix 4 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California (SIP) shall be used for all analyses, unless otherwise specified. Method Detection Levels (MDLs) must be lower than or equal to the ML value, unless otherwise approved by the Regional Board.

CONSTITUENTS	MLs
BACTERIA (single sample limits)	MPN/100ml
Total coliform (marine waters)	10,000
Enterococcus (marine waters)	104
Fecal coliform (marine & fresh waters)	400
E. coli (fresh waters)	235
GENERAL	mg/L
Dissolved Phosphorus	0.05
Total Phosphorus	0.05
Turbidity	0.1 NTU
Total Suspended Solids	2
Total Dissolved Solids	2
Volatile Suspended Solids	2
Total Organic Carbon	1
Total Petroleum Hydrocarbon	5
Biochemical Oxygen Demand	2
Chemical Oxygen Demand	20-900
Total Ammonia-Nitrogen	0.1
Total Kjeldahl Nitrogen	0.1
Nitrate-Nitrite	0.1
Alkalinity	2
Specific Conductance	1 umho/cm
Total Hardness	2
MBAS	0.5
Chloride	2
Fluoride	0.1
Methyl tertiary butyl ether (MTBE)	1
Perchlorate	4 µg/L
METALS (Dissolved & Total)	µg/L
Aluminum	100
Antimony	0.5
Arsenic	1
Beryllium	0.5
Cadmium	0.25
Chromium (total)	0.5
Chromium (Hexavalent)	5
Copper	0.5
Iron	100
Lead	0.5
Mercury	0.5
Nickel	1
Selenium	1
Silver	0.25
Thallium	1
Zinc	1
SEMIVOLATILE ORGANIC COMPOUNDS	
ACIDS	µg/L
2-Chlorophenol	2
4-Chloro-3-methylphenol	1
2,4-Dichlorophenol	1
2,4-Dimethylphenol	2
2,4-Dinitrophenol	5
2-Nitrophenol	10

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CONSTITUENTS	MLs
ACIDS	µg/L
4-Nitrophenol	5
Pentachlorophenol	2
Phenol	1
2,4,6-Trichlorophenol	10
BASE/NEUTRAL	µg/L
Acenaphthene	1
Acenaphthylene	2
Anthracene	2
Benzidine	5
1,2 Benzanthracene	5
Benzo(a)pyrene	2
Benzo(g,h,i)perylene	5
3,4 Benzoflouranthene	10
Benzo(k)flouranthene	2
Bis(2-Chloroethoxy) methane	5
Bis(2-Chloroisopropyl) ether	2
Bis(2-Chloroethyl) ether	1
Bis(2-Ethylhexl) phthalate	5
4-Bromophenyl phenyl ether	5
Butyl benzyl phthalate	10
2-Chloroethyl vinyl ether	1
2-Chloronaphthalene	10
4-Chlorophenyl phenyl ether	5
Chrysene	5
Dibenzo(a,h)anthracene	0.1
1,3-Dichlorobenzene	1
1,4-Dichlorobenzene	1
1,2-Dichlorobenzene	1
3,3-Dichlorobenzidine	5
Diethyl phthalate	2
Dimethyl phthalate	2
di-n-Butyl phthalate	10
2,4-Dinitrotoluene	5
2,6-Dinitrotoluene	5
4,6 Dinitro-2-methylphenol	5
1,2-Diphenylhydrazine	1
di-n-Octyl phthalate	10
Fluoranthene	0.05
Fluorene	0.1
Hexachlorobenzene	1
Hexachlorobutadiene	1
Hexachloro-cyclopentadiene	5
Hexachloroethane	1
Indeno(1,2,3-cd)pyrene	0.05
Isophorone	1
Naphthalene	0.2
Nitrobenzene	1
N-Nitroso-dimethyl amine	5
N-Nitroso-diphenyl amine	1
N-Nitroso-di-n-propyl amine	5
Phenanthrene	0.05

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CONSTITUENTS	MLs
BASE/NEUTRAL	µg/L
Pyrene	0.05
1,2,4-Trichlorobenzene	1
CHLORINATED PESTICIDES	µg/L
Aldrin	0.005
alpha-BHC	0.01
beta-BHC	0.005
delta-BHC	0.005
gamma-BHC (lindane)	0.02
alpha-chlordane	0.1
gamma-chlordane	0.1
4,4'-DDD	0.05
4,4'-DDE	0.05
4,4'-DDT	0.01
Dieldrin	0.01
alpha-Endosulfan	0.02
beta-Endosulfan	0.01
Endosulfan sulfate	0.05
Endrin	0.01
Endrin aldehyde	0.01
Heptachlor	0.01
Heptachlor Epoxide	0.01
Toxaphene	0.5
POLYCHLORINATED BIPHENYLS	µg/L
Aroclor-1016	0.5
Aroclor-1221	0.5
Aroclor-1232	0.5
Aroclor-1242	0.5
Aroclor-1248	0.5
Aroclor-1254	0.5
Aroclor-1260	0.5
ORGANOPHOSPHATE PESTICIDES	µg/L
Atrazine	2
Chlorpyrifos	0.05
Cyanazine	2
Diazinon	0.01
Malathion	1
Prometryn	2
Simazine	2
HERBICIDES	µg/L
2,4-D	10
Glyphosate	5
2,4,5-TP-SILVEX	0.5

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VII. OUTFALL BASED MONITORING

A. MS4 Map and Storm Drains, Channels and Outfalls Map(s) and/or Database.

The IMP and/or CIMP plan(s) shall include a map(s) and/or database of the MS4 to include the following information:

1. Surface water bodies within the Permittee(s) jurisdiction

2. Sub-watershed (HUC 12) boundaries
3. Land use overlay
4. Effective Impervious Area (EIA) overlay (if available)
5. Jurisdictional boundaries
6. The location and length of all open channel and underground pipes 18 inches in diameter or greater
7. The location of all dry weather diversions
8. The location of all major MS4 outfalls within the Permittee's jurisdictional boundary. Each major outfall shall be assigned an alphanumeric identifier, which must be noted on the map
9. Notation of outfalls with significant non-storm water discharges (to be updated annually)
10. Storm drain outfall catchment areas for each major outfall within the Permittee(s) jurisdiction
11. Each mapped MS4 outfall shall be linked to a database containing descriptive and monitoring data associated with the outfall. The data shall include:
 - a. Ownership
 - b. Coordinates
 - c. Physical description
 - d. Photographs of the outfall, where possible, ~~shall be taken~~ to provide baseline information to track operation and maintenance needs over time
 - e. Determination of whether the outfall conveys significant non-storm water discharges
 - f. Storm water and non-storm water monitoring data

VIII. STORM WATER OUTFALL BASED MONITORING

A. Storm Water Outfall Based Monitoring

1. Storm water discharges from the MS4 shall be monitored at outfalls, and/or alternative access points such as manholes or in channels at the Permittee's jurisdictional boundary.
2. The Permittee shall consider the following criteria when selecting outfalls for storm water discharge monitoring:
 - a. The storm water outfall based monitoring program ~~shall~~ should ensure representative data by include monitoring from at least one major outfall per subwatershed (HUC 12) drainage area, within the Permittee's jurisdiction, or alternate approaches as approved in an IMP or CIMP.
 - b. The drainage(s) to the selected outfall(s) shall be representative of the land uses within the Permittee's jurisdiction.

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- c. If a Permittee is implementing an IMP, to the extent possible, the selected outfalls shall not receive drainage from another jurisdiction. If this is not possible, and a Permittee is pursuing an individual outfall based IMP program, the Permittee shall conduct “upstream” and “downstream” monitoring as the system enters and exits the Permittee’s jurisdiction.
- d. The Permittee shall select outfalls with configurations that facilitate accurate flow measurement and in consideration of safety of monitoring personnel.
- e. The specific location of sample collection may be within the MS4 upstream of the actual outfall to the receiving water if field safety or accurate flow measurement require it.

B. Minimum Storm Water Outfall Based Monitoring Requirements

1. The IMP and/or CIMP shall incorporate the following minimum requirements for monitoring storm water:
 - a. Storm water discharges shall be monitored a minimum of three times per year for all parameters except aquatic toxicity, ~~which shall be monitored once per year (unless a proximate downstream receiving water monitoring location has not exhibited aquatic toxicity during the past two years).~~
 - b. Monitoring shall be performed at the selected outfalls during wet weather conditions, defined for the purposes of this monitoring program as follows:
 - i. When the receiving water is the Santa Monica Bay or other ocean or estuary water body, wet weather occurs during a storm event equal to or greater than 0.1 inch of precipitation, as determined by the closest Los Angeles County rain gauge to the catchment area draining to the outfall, or based on an alternative precipitation threshold as provided for in an approved IMP or CIMP.
 - ii. When the receiving water body is a river, stream or creek, wet weather shall be defined as when the flow within the receiving water is at least 20 percent greater than the base flow or an alternative threshold as provided for in an approved IMP or CIMP, or as defined by effective TMDLs within the watershed.
 - iii. Monitoring of storm water discharges shall occur during wet weather conditions resulting from the first rain event of the year, and at least two additional wet weather events within the same wet weather season. Permittees shall target the first storm event of the storm year with a predicted rainfall of at least 0.25 inch at a seventy percent probability of rainfall at least 24 hours prior to the event start time. Permittees shall target subsequent storm events that forecast sufficient rainfall and runoff to meet program objectives and site specific study needs. Sampling events shall be separated by a minimum of three days of dry conditions (less than 0.1 inch of rain each day).

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- ~~iv. Storm water outfall based monitoring shall commence within 6 hours prior to downstream receiving water monitoring, unless Permittees can demonstrate that a longer time period is reflective of the rain/storm water runoff event.~~
- c. At a minimum, the following parameters shall be monitored unless a surrogate pollutant has been approved by the Executive Officer of the Regional Water Board:
- i. Flow
 - ii. Pollutants assigned a WQBEL derived from TMDL WLAs (See Attachments L-R of this Order),
 - iii. Other pollutants identified on the CWA section 303(d) List for the receiving water or downstream receiving waters,
 - iv. Total Suspended Solids (TSS) and Suspended-Sediment Concentration (SSC) if the receiving water is listed on the CWA Section 303(d) list for sedimentation, siltation or turbidity,
 - v. Field measurements applicable to inland freshwater bodies only: hardness, pH, dissolved oxygen, temperature, and specific conductivity,
 - ~~vi. Aquatic Toxicity~~ Pollutants identified in a TIE conducted at the downstream receiving water monitoring station during the most recent sample event, or where the TIE conducted on the receiving water sample was inconclusive, aquatic toxicity (if aquatic toxicity has been observed downstream of the outfall in the past two years). If the discharge exhibits aquatic toxicity, then a TIE shall be conducted.
 - vi.d. Other parameters in Table E-2 identified as exceeding the lowest applicable water quality objective in the nearest downstream receiving water monitoring station per Part VI.C.1.e.

C. Sampling Methods

1. Samples shall be collected during the first 24 hours of the storm water discharge or for the entire storm water discharge if it is less than 24 hours.
2. If a Permittee is not participating in a IMP or CIMP, the flow-weighted composite sample for a storm water discharge shall be taken with a continuous sampler, or it shall be taken as a combination of a minimum of 3 sample aliquots, taken in each hour of discharge for the first 24 hours of the discharge or for the entire discharge if the storm event is less than 24 hours, with each aliquot being separated by a minimum of 15 minutes within each hour of discharge, unless the Regional Water Board Executive Officer approves an alternate protocol.

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IX. NON-STORM WATER OUTFALL BASED SCREENING AND MONITORING**A. Objectives of the Non-Storm Water Outfall Screening and Monitoring Program**

The outfall screening and monitoring process is intended to meet the following objectives.

1. Develop criteria or other means to ensure that all outfalls with significant non-storm water discharges are identified and assessed during the term of this Order.
2. For outfalls determined to have significant non-storm water flow, determine whether flows are the result of illicit connections/illicit discharges (IC/IDs), authorized or conditionally exempt non-storm water flows, natural flows, or from unknown sources.
3. Refer information related to identified IC/IDs to the IC/ID Elimination Program (Part VI.D.9-10 of this Order) for appropriate action.
4. Based on existing screening or monitoring data or other institutional knowledge, assess the impact of non-storm water discharges (other than identified IC/IDs) on the receiving water.
5. Prioritize monitoring of outfalls considering the potential threat to the receiving water and applicable TMDL compliance schedules.
6. Conduct monitoring or assess existing monitoring data to determine the impact of non-storm water discharges on the receiving water.
7. Conduct monitoring or other investigations to identify the source of pollutants in non-storm water discharges.
8. Use results of the screening process to evaluate the conditionally exempt non-storm water discharges identified in Parts III.A.2 and III.A.3 of this Order and take appropriate actions pursuant to Part III.A.4.d of this Order for those discharges that have been found to be a source of pollutants. Any future reclassification shall occur per the conditions in Parts III.A.2 or III.A.6 of this Order.
9. Maximize the use of Permittee resources by integrating the screening and monitoring process into existing or planned IMP and/or CIMP efforts.

B. Outfall Screening and Monitoring Plan

1. Concurrent with the development of an IMP or CIMP, or within ~~six (6) months~~ one (1) year of the effective date of this Order, each Permittee shall submit a non-storm water outfall-based screening and monitoring program plan that documents with written procedures an explanation of how the program is to be implemented. The procedures must be updated as needed to reflect the Permittee's program. The plan may be a separate stand-alone document or may be part of an IMP or CIMP.

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2. Each Permittee shall conduct at least one re-assessment of its non-storm water outfall-based screening and monitoring program during the term of this Order to determine whether changes or updates are needed. Where changes are needed, the Permittee shall make the changes in its written program documents, implement these changes in practice, and describe the changes within the next annual report.

C. Identification of Outfalls with Significant with Non-Storm Water Discharge

1. Based on the inventory of MS4 outfalls required under Part VII of this MRP, each Permittee shall identify MS4 outfalls with significant non-storm water discharges. Significant non-storm water discharges may be determined by one or more of the following characteristics:
 - a. Discharges from major outfalls subject to dry weather TMDLs.
 - b. Discharges for which existing monitoring data exceeds non-storm water Action Levels identified in Attachment G of this Order.
 - c. Non-storm water discharges that have caused or have the potential to cause overtopping of downstream diversions.
 - d. Discharges exceeding a proposed threshold discharge rate as determined by the Permittee.
 - e. Other characteristics as determined by the Permittee and incorporated within their screening program plan.

D. Inventory of MS4 Outfalls with Non-Storm Water Discharges

1. Each Permittee shall develop and maintain an inventory of MS4 outfalls and identify those with known significant non-storm water discharges and those requiring no further assessment. If the MS4 outfall requires no further assessment, the inventory must include the rationale for the determination of no further action required. This inventory shall be recorded in a database with outfall locations linked to the MS4 Storm Drains, Channels and Outfalls map required in Part VII.A of this MRP. GIS is preferred.
2. As a component of the inventory, each Permittee shall record existing data from past outfall screening and monitoring and initiate data collection efforts as warranted. The data shall include the physical attributes of those MS4 outfalls or alternative monitoring locations determined to have significant non-storm water discharges. Attributes to be obtained shall, at a minimum, include:
 - a. Date and time of last visual observation or inspection
 - b. Outfall alpha-numeric identifier
 - c. Description of outfall structure including size (e.g., diameter and shape)
 - d. Description of receiving water at the point of discharge (e.g., natural, soft-bottom with armored sides, trapezoidal, concrete channel)

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- e. Latitude/longitude coordinates
 - f. Nearest street address
 - g. Parking, access, and safety considerations
 - h. Photographs of outfall condition
 - i. Photographs of significant non-storm water discharge (or indicators of discharge) unless safety considerations preclude obtaining photographs
 - j. Estimation of discharge rate
 - k. All diversions either upstream or downstream of the outfall
 - l. Observations regarding discharge characteristics such as turbidity, odor, color, presence of debris, floatables, or characteristics that could aid in pollutant source identification.
4. Each year, the MS4—Storm Drains, Channels and Outfalls map and associated outfall database required in Part VII.A of the MRP shall be updated to incorporate the most recent characterization data for outfalls with significant non-storm water discharge.

E. Prioritized Source Identification

1. Outfalls within the inventory shall be prioritized in the following order (a= highest priority, etc.) for source identification activities:
 - a. Outfalls discharging directly to receiving waters with WQBELs or receiving water limitations in the TMDL provisions for which final compliance deadlines have passed.
 - b. All major outfalls and other outfalls that discharge to a receiving water subject to a TMDL shall be prioritized according to TMDL compliance schedules.
 - c. Outfalls for which monitoring data exist and indicate recurring exceedances of one or more of the Action Levels identified in Attachment G of this Order.
 - d. All other major outfalls identified to have significant non-storm water discharges.
2. Each Permittee shall develop a source identification schedule based on the prioritized list of outfalls exhibiting significant non-storm water discharges. The schedule shall ensure that source investigations are conducted for no less than 25% of the outfalls in the inventory within three years of the effective date of this Order and 100% of the outfalls in the inventory within 5 years of the effective date of this Order.
3. Alternatively, a Permittee may request an alternative prioritization and schedule from the Regional Water Board if it can demonstrate an equivalent level of source investigation and abatement through an approved IMP or CIMP.

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F. Identify Source(s) of Significant Non-Storm Water Discharge

1. If the source is determined to be an illicit discharge, each Permittee shall implement procedures to eliminate the discharge consistent with IC/ID requirements and document the actions in the next annual report.
2. If the source is determined to be an NPDES permitted discharge, a discharge subject to a Record of Decision approved by USEPA pursuant to section 121 of CERCLA, a conditionally exempt essential non-storm water discharge, or entirely comprised of natural flows as defined at Part III.A.d of this Order, document the source and report to the Regional Water Board ~~within 30 days of determination and~~ in the next annual report.
3. If the source is either unknown or a conditionally exempt, but non-essential, non-storm water discharge, each Permittee shall conduct monitoring required in Part IX.G of this MRP.
4. If the discharge is comprised of more than one source, the Permittee shall attempt to quantify the relative contribution from the individual or group of similar sources (e.g., irrigation overspray) and classify the contributions as authorized, conditionally exempt essential, natural, illicit discharge, conditionally exempt non-essential, or unknown.
5. If the source of non-storm water discharge is unknown, the Permittee shall describe the efforts undertaken to identify the source. Methods for identifying the source of non-storm water discharge may include inspection and/or surveillance, discharge monitoring and data loggers, video or physical inspection, monitoring for indicator parameters (e.g., surfactants, chlorine, Pyrethroids), or other means.
6. If a source originates within an upstream jurisdiction, the Permittee shall inform in writing both the upstream jurisdiction and the Regional Water Board within 30 days of determination of the presence of the discharge, all available characterization data, contribution determination efforts, and efforts taken to identify its source.
7. MS4 outfalls requiring no further action shall be maintained in the ~~MS4 outfall~~ Storm Drains, Channels and Outfalls map and associated database (see Part VII.A. of this MRP).

G. Monitor Non-Storm Water Discharges Exceeding Criteria

1. Within 90 days after completing the source identification or after the Executive Officer of the Regional Water Board approves the IMP or CIMP, whichever is later, each Permittee shall monitor outfalls that have been determined to convey significant discharges comprised of either unknown or conditionally exempt non-storm water discharges, or continuing discharges attributed to illicit discharges. The following parameters shall be monitored:

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- ~~e.b.~~ _____ Pollutants assigned a WQBEL or receiving water limitation to implement TMDL Provisions for the respective receiving water, as identified in Attachments L - R of this Order,
- ~~f.~~ _____ ~~Pollutants with non-storm water action levels as identified in Attachment G of this Order,~~
- ~~g.c.~~ _____ Other pollutants identified on the CWA section 303(d) List for the receiving water or downstream receiving waters,
- ~~d.~~ _____ ~~Aquatic Toxicity (required when the previous monitoring results from this outfall indicated toxicity, or results from a proximate downstream receiving water monitoring indicated aquatic toxicity during the last two years)~~ Pollutants identified in a TIE conducted in response to observed aquatic toxicity during dry weather at the nearest downstream receiving water monitoring station during the last sample event or, where the TIE conducted on the receiving water sample was inconclusive, aquatic toxicity. If the discharge exhibits aquatic toxicity, then a TIE shall be conducted.
- ~~h.e.~~ _____ Other parameters in Table E-2 identified as exceeding the lowest applicable water quality objective in the nearest downstream receiving water monitoring station per Part VI.D.1.d.
2. For outfalls subject to a dry weather TMDL, monitoring frequency shall be per the approved CMP TMDL Monitoring Plan or as otherwise specified in the TMDL, or as specified in an IMP or CIMP approved by the Executive Officer of the Regional Water Board.
 3. For outfalls not subject to dry weather TMDLs, monitoring frequency shall be four times during the first year following source identification, distributed approximately quarterly, during dry weather conditions, ~~except where required based on receiving water monitoring data, aquatic toxicity shall be monitored two times during the first year~~ or as specified in an IMP or CIMP approved by the Executive Officer of the Regional Water Board.
 4. Except as required by an applicable TMDL CMP Monitoring Plan, IMP, or CIMP approved by the Executive Officer of the Regional Water Board, monitoring frequency may be reduced to twice per year, beginning in the second year of monitoring, if pollutant concentrations measured during the first year do not exceed WQBELs, non-storm water Action Levels or water quality standards for other pollutants identified on the CWA section 303(d) List for the receiving water or downstream receiving waters.
 5. ~~Unless required by a TMDL, aquatic toxicity monitoring of significant non-storm water discharges shall only be required when results from a proximate downstream receiving water monitoring have indicated aquatic toxicity during the last two years. If initial monitoring results from an outfall indicate toxicity, aquatic toxicity shall be monitor a second time during the reporting year. Aquatic toxicity monitoring may be reduced to once per year, if monitoring conducted during the first year~~

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~~indicates that the discharge was not toxic. Aquatic toxicity monitoring shall be performed per the procedures described in Part XII of this MRP.~~

- 6.5.** Following two years of monitoring, the Permittee may submit a written request to the Executive Officer of the Regional Water Board to reduce or eliminate monitoring of specified pollutants, based on an evaluation of the monitoring data.

H. Sampling Methods

1. For the purposes of this monitoring program, non-storm water discharges shall be monitored during days when precipitation is < 0.1 inch and those days not less than 3 days after a rain day unless an alternative criterion is provided for in an approved IMP or CIMP. A rain day is defined as those with ≥ 0.1 inch of rain.
2. Flow-weighted composite samples shall be taken for a non-storm water discharge using a continuous sampler, or it shall be taken as a combination of a minimum of 3 sample aliquots, taken in each hour during a 24-hour period, unless the Regional Water Board Executive Officer approves an alternate protocol.

X. NEW DEVELOPMENT/RE-DEVELOPMENT EFFECTIVENESS TRACKING

- A.** Each Permittee shall maintain a database providing the following information for each new development/re-development subject to the requirements of Part VI.D.6 of this Order that is approved by the Permittee on or after the effective date of this Order:
1. Name of the Project and Developer,
 2. Project location and map (preferably linked to the GIS storm drain map),
 3. Date of Certificate of Occupancy,
 4. 85th percentile storm event for the project design (inches per 24 hours),
 5. 95th percentile storm event for projects draining to natural water bodies (inches per 24 hours),
 6. Other design criteria required to meet hydromodification requirements for drainages to natural water bodies,
 7. Project design storm (inches per 24-hours),
 8. Project design storm volume (gallons or MGD),
 9. Percent of design storm volume to be retained on site,
 10. Design volume for water quality mitigation treatment BMPs, if any.
 11. If flow through, water quality treatment BMPs are approved, provide the one-year, one-hour storm intensity as depicted on the most recently issued isohyetal map published by the Los Angeles County Hydrologist,

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- 12. Percent of design storm volume to be infiltrated at an off-site mitigation or groundwater replenishment project site,
- 13. Percent of design storm volume to be retained or treated with biofiltration at an off-site retrofit project,
- 14. Location and maps (preferably linked to the GIS storm drain map required in Part VII.A of this MRP) of off-site mitigation, groundwater replenishment, or retrofit sites.
- ~~14-15. Documentation of issuance of requirements to the developer.~~

XI. REGIONAL STUDIES

~~A. Pyrethroid Insecticides Study Requirements~~

- ~~1. Each Permittee shall perform a Pyrethroid Insecticides study to accomplish the following objectives:

 - ~~a. Establish baseline data for major watersheds~~
 - ~~b. Evaluate whether Pyrethroid Insecticide concentrations are at or approaching levels known to be toxic to sediment-dwelling aquatic organisms.

 - ~~i. Determine if Pyrethroids discovered are from urban sources.~~
 - ~~ii. Assess any trends over the permit term.~~~~~~
- ~~2. Each Permittee shall incorporate monitoring for Pyrethroid Insecticides according to the following:

 - ~~a. No later than the second year after the effective date of this Order, monitoring shall begin.~~
 - ~~b. Quality Assurance Project Plan (QAPP) to be submitted to the Regional Water Board Executive Officer for approval 12 months prior to beginning monitoring.~~
 - ~~c. In selecting sites to conduct monitoring for Pyrethroid Insecticides, Permittees shall review existing monitoring programs in the watersheds by other public and private entities, watershed coalitions, and citizen volunteers, so as to complement and not duplicate efforts.~~
 - ~~d. Establish at least two stations along the main stems of each major watershed river that are influenced by urban discharges.~~~~
- ~~3. Each Permittee shall monitor Pyrethroid Insecticides stations according to the following:

 - ~~a. Each Permittee shall monitor one sampling event per station per monitoring year.~~
 - ~~b. Monitoring shall occur after sediment has settled within the waterbody, and safe access can be assured.~~~~

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- ~~c. Sufficient sediment is to be collected at each station in a pre-cleaned glass jar by skimming the upper 1 cm of the sediment column with a steel scoop, and held on ice until returned to the laboratory.~~
- ~~d. Sediment shall be homogenized in the laboratory by hand mixing, then held at 4 °C (toxicity samples) or -20 °C (chemistry samples).~~
- ~~e. All samples taken shall be analyzed for the following Pyrethroids:~~
- ~~(1) bifenthrin~~
 - ~~(2) cyfluthrin~~
 - ~~(3) cypermethrin~~
 - ~~(4) deltamethrin~~
 - ~~(5) esfenvalerate~~
 - ~~(6) lambda-cyhalothrin~~
 - ~~(7) permethrin~~
 - ~~(8) tralomethrin (if laboratory is capable of analyzing for it)~~
- ~~f. Detection limits for all Pyrethroids shall be as close to 1ng/g (dry weight) as reasonably achievable.~~
- ~~g. Each sediment sample is to measure the following:~~
- ~~i. Total organic carbon (TOC).~~
 - ~~ii. All samples shall be tested for toxicity to 7 to 10 day old *Hyalella azteca* according to standard USEPA testing methods.⁴~~
 - ~~iii. Use of the approach described in *Aquatic Toxicity Due to Residential Use of Pyrethroid Insecticides*⁵ for toxicity testing shall be used.~~
- ~~h. Analysis by a laboratory that has performed sediment toxicity testing for Pyrethroid Insecticides is preferred.~~
- ~~i. Monitoring results from each station shall be sent electronically to the Regional Water Board's Storm Water Site at MS4stormwaterRB4@waterboards.ca.gov, no later than 90 days from sample collection date. The sample data transmitted shall be in the most recent update of the Southern California Municipal Storm Water Monitoring Coalition's (SMC) Standardized Data Transfer Formats (SDTFs).~~

⁴ U.S. EPA. *Methods for Measuring the Toxicity and Bioaccumulation of Sediment-Associated Contaminants with Freshwater Invertebrates*; EPA Publication 600/R-99/064; U.S. Environmental Protection Agency: Washington, DC, 2000; 192 pp.

⁵ *Aquatic Toxicity Due to Residential Use of Pyrethroid Insecticides*; Weston, D.P.; Holmes, R.W.; You, J.; Lydy, M.J. *Environ. Sci. Technol.*; (Article); 2005; 39(24); 9780 pp.

- ~~j. If toxicity is attributed to Pyrethroids, then consultation with USEPA, the California Department of Pesticide Regulations, and the California Stormwater Quality Association's (CASQA) pesticides committee (UP3 Project web site), shall be required to obtain relevant information to use in developing the recommendations to mitigate Pyrethroids in the Final Study Report.~~
- ~~k. Final Report for the Pyrethroid Insecticides study shall contain the following:

 - ~~i. Executive summary~~
 - ~~ii. Methods~~
 - ~~iii. Results (including map depicting monitoring stations)~~
 - ~~iv. Discussion~~
 - ~~v. Recommendations to mitigate Pyrethroids.~~~~
- ~~l. The Final Report shall be completed and submitted to the Executive Officer of the Regional Water Board no later than 8 months after completion of the study.~~
- ~~m. The Pyrethroid Insecticides Study requirement may be satisfied by another tributary monitoring program within the Watershed performing a sediment Pyrethroid Insecticides Study that is monitoring to assess pyrethroid concentrations and sediment toxicity, so as to complement other ongoing programs.~~
- ~~n. Permittees can elect to conduct the Pyrethroid Insecticides Study on a jurisdiction, watershed, or countywide scale. If Permittees elect to conduct the study at either a watershed or countywide scale, the study shall be incorporated into an IMP or GIMP and the Permittee shall notify the Regional Water Board Executive Officer of its intent consistent with the notification requirements contained in Section IV.C of this MRP (Integrated Monitoring Plans).~~

B.A. Southern California Stormwater Monitoring Coalition Watershed Monitoring Program

1. The Southern California Stormwater Monitoring Coalition (SMC) Regional Watershed Monitoring Program was initiated in 2008. This program is conducted in collaboration with the Southern California Coastal Water Research Project (SCCWRP), State Water Board's Surface Water Ambient Monitoring Program, three Southern California Regional Water Quality Control Boards (Los Angeles, Santa Ana, and San Diego) and several county storm water agencies (Los Angeles, Ventura, Orange, Riverside and San Diego). SCCWRP acts as the facilitator to organize the program and completes data analysis and report preparation.
2. The SMC monitoring program seeks to coordinate and leverage existing monitoring efforts to produce regional estimates of condition, improve data

comparability and quality assurance, and maximize data availability, while conserving monitoring expenditures. The primary goal of this program is to implement an ongoing, large-scale regional monitoring program for southern California's coastal streams and rivers. The monitoring program addresses three main questions:

- a. What is the condition of streams in southern California?
 - b. What are the stressors that affect stream condition?; and
 - c. Are conditions getting better or worse?
3. A comprehensive program was designed by the SMC, in which each participating group assesses its local watersheds and then contributes their portion to the overall regional assessment. The program utilizes the following indicators: benthic macroinvertebrate community bioassessment, benthic algal community bioassessment (soft algae and diatoms), riparian wetland evaluation (using California Rapid Assessment Methodology), water chemistry (nutrients and certain pesticides), water toxicity (using *Ceriodaphnia*), and physical habitat. Sampling occurs in 15 coastal southern California watersheds from Ventura to the US-Mexico border, and sites are sampled randomly across three land use types (open space, urban and agriculture). Six sites are sampled per year per watershed, resulting in monitoring of 90 sites per year and 450 sites overall over a five-year period (reaching the statistically desirable target of 30 data points per watershed).
4. To continue to implement the SMC design, each Permittee shall be responsible for supporting the monitoring described at the sites within the watershed management area(s) that overlap with the Permittee's jurisdictional area. These include six random sites annually in the Santa Monica Bay Watershed Management area and at three random sites annually in the Santa Clara River Watershed (the other three sites are funded by the Ventura County MS4 Permittees). Permittees shall continue to contribute monitoring resources to the San Gabriel River and Los Angeles River Regional Watershed Monitoring Programs (overall, both of these programs fund six sites per year to contribute to the SMC Program).

XII. AQUATIC TOXICITY MONITORING METHODS

- A.** Aquatic Toxicity Monitoring as required in Parts VI (Receiving Water Monitoring), VIII (Storm Water Outfall Based Monitoring), and IX (Non-storm Water Outfall Based Monitoring) of this MRP, shall be conducted according to the procedures described in this Part. When the State Water Board's *Policy for Toxicity Assessment and Control* is fully approved and in effect, the Regional Water Board Executive Officer may direct the Permittee(s) to replace current toxicity program elements with standardized procedures in the policy.
- B.** The Permittee(s) shall collect and analyze samples taken from receiving water monitoring locations and outfall discharges, as soon as possible after sample collection, to evaluate the extent and causes of toxicity in receiving waters.

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B.C. ~~_____ Toxicity samples are to may be flow-weighted composite samples, or grab samples, for wet and dry event sampling (considering holding times, below) and can be collected manually or automatically.~~

C.D. ~~_____ The total sample volume of sample shall be determined both by the specific toxicity test methods to be used and the additional volume necessary for . At a minimum it is suggested to collect 5 gallons for baseline testing, and for Toxicity Identification Evaluation (TIE) studies. Sufficient sample volume shall be collected to perform both the required toxicity tests and TIE studies. The same refrigerated sample showing toxicity shall be used for the TIE, even though the holding time may exceed 72 hours.~~

D.E. ~~_____ Holding Times. All toxicity tests shall be conducted as soon as possible following sample collection. A The 36-hour sample holding time for test initiation shall be targeted. Sample storage (holding time) time shall not exceed However, no more than 72 hours shall elapse before the conclusion of (from sample collection and test initiation through lab processing).~~

E.F. ~~_____ Definition of Chronic Toxicity. Chronic toxicity measures a sublethal effect (e.g., reduced growth, reproduction) to experimental test organisms exposed to an effluent or receiving waters compared to that of the control organisms. If the State Water Board adopts the Policy for Toxicity Assessment and Control that outlines the use of the Test of Significant Toxicity (TST), modifying the current hypothesis test methods, the Regional Water Board Executive Officer will revise the Monitoring and Reporting Program, as applicable, to reflect these changes. These revisions would be made as soon as practicable following USEPA approval of the new state policy.~~

F.G. ~~_____ Acute Toxicity Chronic Toxicity Receiving Water and Outfall Effluent Monitoring Programs.~~

1. ~~Test Freshwater Test Species and Methods. Acute Toxicity: Acute toxicity is a measure of primarily lethal effects that occur over a 96-hour period. Acute toxicity shall be measured in percent survival measured in undiluted (100%) sample (receiving water or discharge effluent).~~

~~If samples are collected in receiving waters with salinity <1 ppt, or from outfalls discharging to receiving waters with salinity <1 ppt, then the Permittee(s) shall conduct the following critical life stage chronic toxicity tests on undiluted samples in accordance with species and short-term test methods in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002; Table IA, 40 CFR Part 136). In no case shall the following test species be substituted with another organism unless written authorization from the Regional Water Board Executive Officer is received.~~

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- i. A static renewal toxicity test with the fathead minnow, *Pimephales promelas* (Larval Survival and Growth Test Method 1000.0⁶).
- ii. A static renewal toxicity test with the daphnid, *Ceriodaphnia dubia* (Survival and Reproduction Test Method 1002.0⁵).
- iii. A static renewal toxicity test with the green alga, *Selenastrum capricornutum* (also named *Raphidocelis subcapitata*) (Growth Test Method 1003.0).

1. _____

- a. ~~The average survival in the undiluted sample for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, and~~
 - b. ~~No single test shall produce less than 70% survival.~~
2. Marine and Estuarine Test Species and Methods. Acute Toxicity Receiving Water/Effluent Monitoring Program.

2. If samples are collected in receiving waters with salinity >1 ppt, or from outfalls discharging to receiving waters with salinity >1 ppt, then the Permittee(s) shall conduct the following critical life stage chronic toxicity tests on undiluted samples in accordance with species and short-term test methods in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, 1995). Artificial sea salts shall be used to increase sample salinity. In no case shall the following test species be substituted with another organism unless written authorization from the Regional Water Board Executive Officer is received.

- a. A static renewal toxicity test with the topsmelt, *Atherinops affinis* (Larval Survival and Growth Test Method 1006.01⁵); Method. The Permittee(s) shall conduct acute toxicity tests (96-hour static renewal toxicity tests) on water samples, by methods specified in 40 CFR Part 136 which cites USEPA's *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fifth Edition, October 2002, USEPA, Office of Water, Washington D.C. (EPA/821/R-02/012) or a more recent edition to ensure compliance.
- b. A static non-renewal toxicity test with the purple sea urchin, *Strongylocentrotus purpuratus* (Fertilization Test Method 1008.0); and Test Species. The fathead minnow, *Pimephales promelas* (Acute Toxicity Test Method 2000.0), shall be used as the test species for fresh water and the topsmelt, *Atherinops affinis*, shall be used as the test species in brackish water. However, if the salinity of the receiving water is between 1 to 32 parts per thousand (ppt), the Permittee(s) may have the option of

⁶ Daily observations for mortality make it possible to calculate acute toxicity for desired exposure periods (e.g., a 7-day acute endpoint).

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~~using the inland silverside, *Menidia beryllina* (Acute Toxicity Test Method 2006.0), instead of the topsmelt. The method for topsmelt (Larval Survival and Growth Test Method 1006.0) is found in USEPA's Short-term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to West Coast Marine and Estuarine Organisms, First Edition, August 1995 (EPA/600/R-95/136). The Pacific mysid shall be used as the invertebrate test species for marine water, and the water flea (*Ceriodaphnia dubia*, *Daphnia pulex* or *Daphnia magna*) shall be used as the invertebrate test species in fresh water.~~

- ~~c. A static non-renewal toxicity test with the giant kelp, *Macrocystis pyrifera* (Germination and Growth Test Method 1009.0). Alternate Reporting. For the acute toxicity testing with topsmelt, the Permittee(s) may elect to report the results or endpoint from the first 96 hours of the chronic toxicity test as the results of the acute toxicity test, using USEPA's August 1995 method (EPA/600/R-95/136) to conduct the chronic toxicity test.~~

3. Test Species Sensitivity Screening.

To determine the most sensitive test species, the Permittee(s) shall conduct two wet weather and two dry weather toxicity tests with a vertebrate, an invertebrate, and a plant. After this screening period, subsequent monitoring shall be conducted using the most sensitive test species. Alternatively, if a sensitive test species has already been determined, or if there is prior knowledge of potential toxicant(s) and a test species is sensitive to such toxicant(s), then monitoring shall be conducted using only that test species. Sensitive test species determinations shall also consider the most sensitive test species used for proximal receiving water monitoring. After the screening period, subsequent monitoring shall be conducted using the most sensitive test species. Rescreening shall occur in the fourth year of the permit term.

- ~~e. 4. Chronic toxicity test biological endpoint data shall be analyzed using the Test of Significant Toxicity t-test approach specified in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (U.S. Environmental Protection Agency, Office of Wastewater Management, Washington, DC. EPA 833-R-10-003, 2010.) For this monitoring program, the critical chronic instream waste concentration (IWC) is set at 100% receiving water for receiving water samples and 100% effluent for wet- and dry-weather outfall samples. A 100% receiving water/outfall effluent sample and a control shall be tested.~~
- ~~i. Toxicity Identification Evaluation. The Permittee(s) shall immediately begin a Toxicity Identification Evaluation (TIE) and implement the Initial Investigation Toxicity Reduction Evaluation (TRE) workplan if any of the results are less than 70% survival or the average survival in the undiluted sample for any three (3) consecutive 96-hour static or continuous flow bioassay tests is less than 90%.~~

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G.H. Quality Assurance. Chronic Toxicity

1. ~~If the receiving water or outfall effluent test does not meet all test acceptability criteria (TAC) specified in the test methods manuals (*Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002) and *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, 1995)), then the Permittee(s) must re-sample and re-test at the earliest time possible. Definition of Chronic Toxicity. Chronic toxicity measures a sublethal effect (e.g., reduced growth, reproduction) to experimental test organisms exposed to an effluent or receiving waters compared to that of the control organisms. Chronic toxicity shall be measured in TU_c, where TU_c = 100/NOEC. The No Observable Effect Concentration (NOEC) is expressed as the maximum percent effluent concentration that causes no observable effect on test organisms, as determined by the results of a critical life stage toxicity test.~~
2. ~~Control water, including brine controls, shall be laboratory water prepared and used as specified in the test methods manuals. This Order includes a chronic toxicity trigger defined as an exceedance of 1.0 TU_c in a critical life stage test of 100% effluent. (The monthly median for chronic toxicity of 100% effluent shall not exceed 1 TU_c in a critical life stage test.)~~
3. ~~If organisms are not cultured in-house, then concurrent testing with a reference toxicant shall be conducted. If organisms are cultured in-house, then monthly reference toxicant testing is sufficient. Reference toxicant tests and effluent toxicity tests shall be conducted using the same test conditions (e.g., same test duration, etc.).~~ Chronic Toxicity Effluent Monitoring Program.
 - a. ~~Test Species and Methods:~~
 - i. ~~The Permittee(s) shall conduct critical life stage chronic toxicity tests on 24-hour composite 100% effluent or receiving water grab samples.~~
 - ii. ~~For freshwater discharge Permittee(s) shall conduct the chronic toxicity test in accordance with USEPA's *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms Fourth Edition, October 2002*, (EPA/821/R-02/013), or a more recent edition.~~
 - iii. ~~For brackish effluent, the Permittee(s) shall conduct the chronic toxicity test in accordance with USEPA's *Short-Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to West Coast Marine and Estuarine Organisms, First Edition, August 1995*, (EPA/600/R-95/136), or *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, Third Edition, October 2002*, (EPA/821-R-02-014), or a more recent edition.~~
 - iv. ~~The Permittee(s) shall conduct tests as follows: with a vertebrate, an invertebrate, and a plant for the first three suites of tests. After the screening period, monitoring shall be conducted using the most sensitive species.~~

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~~v. Re-screening is required every 24 months. The Permittee(s) shall re-screen with the three species listed above and continue to monitor with the most sensitive species. If the first suite of re-screening tests demonstrates that the same species is the most sensitive one, then the re-screening does not need to include more than one suite of tests. If a different species is the most sensitive one or if there is ambiguity then the Permittee(s) shall proceed with suites of screening tests for a minimum of three, but not to exceed five suites.~~

~~vi. In brackish waters, the presence of chronic toxicity may be estimated as specified using West Coast marine organisms according to USEPA's Short-Term Methods for Estimating Chronic Toxicity of Effluent and Receiving Waters to West Coast Marine and Estuarine Organisms, August 1995 (EPA/600/R-95/136), or a more recent edition.~~

~~vii. After the screening period, subsequent monitoring shall be conducted using the most sensitive species.~~

~~viii. Outfall samples shall be collected before discharge to the receiving water.~~

~~4. Chronic Toxicity Identification Evaluation.~~

~~i.3. If the chronic toxicity of the effluent exceeds 1.0 TUC, the Permittee(s) shall immediately implement the Initial Investigation TRE workplan. The Permittee(s) shall ensure that they receive results of a failing chronic toxicity test within 24 hours of the completion of the test and the additional tests shall begin within 5 business days of the receipt of the result.~~

H.I. Toxicity Identification Evaluation (TIE). Quality Assurance

- ~~1. A toxicity test sample is immediately subject to TIE procedures to identify the toxic chemical(s), if either the survival or sublethal endpoint demonstrates a Percent Effect value equal to or greater than 50% at the IWC. Percent Effect is defined as the effect value—denoted as the difference between the mean control response and the mean IWC response, divided by the mean control response—multiplied by 100. Concurrent testing with a reference toxicant shall be conducted. Reference toxicant tests shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration, etc).~~
- ~~2. A TIE shall be performed to identify the causes of toxicity using the same species and test method and, as guidance, U.S. EPA manuals: *Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I* (EPA/600/6-91/005F, 1992); *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/080, 1993); *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/081, 1993); and *Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document* (EPA/600/R-96-054, 1996). If either the reference toxicant test or receiving water or effluent test does not meet all test~~

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~~acceptability criteria (TAC) as specified in the test methods manuals (EPA/600/4-91/002 and EPA/821-R-02-014), then the Permittee(s) must re-sample and re-test at the earliest time possible.~~

- ~~3. The TIE should be conducted on the test species demonstrating the most sensitive toxicity response at a sampling station. A TIE may be conducted on a different test species demonstrating a toxicity response with the caveat that once the toxicant(s) are identified, the most sensitive test species triggering the TIE shall be further tested to verify that the toxicant has been identified and addressed. Control and dilution water should be receiving water (if non-toxic) or laboratory water, as appropriate, as described in the manual. If the dilution water used is different from the water the test species are grown in (culture water), a second control using culture water shall be used.~~

- ~~3.4. A TIE Prioritization Metric (see Appendix 5 in SMC Model Monitoring Program) may be utilized to rank sites for TIEs.~~

~~I.J. Toxicity Reduction Evaluation (TRE). Preparation of an Initial Investigation TRE Workplan~~

- ~~1. When a toxicant or class of toxicants is identified through a TIE conducted at a receiving water monitoring station, Permittees shall analyze for the toxicant(s) during the next scheduled sampling event in the discharge from the outfall(s) upstream of the receiving water location.~~
- ~~2. If the toxicant is present in the discharge from the outfall at levels above the applicable receiving water limitation, a TRE shall be performed for that toxicant.~~
- ~~4.3. The TRE shall include all reasonable steps to identify the source(s) of toxicity and discuss appropriate BMPs to eliminate the causes of toxicity. No later than 30 days after the source of toxicity and appropriate BMPs are identified, the Permittee(s) shall submit a TRE Corrective Action Plan to the Regional Water Board Executive Officer for approval. At minimum, the plan shall include a discussion of the following: The Permittee(s) shall prepare and submit a copy of the Permittee(s)'s initial investigation TRE workplan to the Executive Officer of the Regional Water Board for approval within 90 days of the effective date of this Order. If the Executive Officer does not disapprove the workplan within 60 days, the workplan shall become effective. The Permittee(s) shall use USEPA manuals EPA/600/2-88/070 (industrial) or EPA/833B-99/002 (municipal) as guidance. This workplan shall describe the steps the Permittee(s) intends to follow if toxicity is detected, and should include, at a minimum:~~
- ~~a. The potential sources of pollutant(s) causing toxicity. A description of the investigation and evaluation techniques that will be used to identify potential causes and sources of toxicity, effluent variability, and MCM and/or BMP efficiency.~~
 - ~~b. A list of municipalities and agencies that may have jurisdiction over sources of pollutant(s) causing toxicity. A description of the Permittee(s)~~

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~~methods for minimizing the toxicity of storm water and non-storm water discharges.~~

- ~~c. Recommended BMPs to reduce the pollutant(s) causing toxicity. If a TIE is necessary, the name or position title of who would conduct the TIEs (i.e., an in-house expert or an outside contractor).~~
- ~~d. Proposed post-construction control measures to reduce the pollutant(s) causing toxicity.~~
- ~~e. Follow-up monitoring to demonstrate that the toxicants have been reduced or eliminated toxicity has been removed.~~
- ~~e.4. The TRE process shall be coordinated with TMDL development and implementation (i.e., if a TMDL for 4,4'-DDD is being implemented when a TRE for 4,4'-DDD is required, then efforts shall be coordinated to avoid overlap).~~

J.K. Chronic Toxicity Reporting Steps in TRE and TIE Procedures

- ~~1. Aquatic toxicity monitoring results submitted to the Regional Water Board shall be consistent with the requirements identified in Part XIV.L and M and Part XVIII.A.5 and A.7 of the MRP. The Regional Water Board shall be notified no later than 30 days from completion of each aspect of the analysis for TIEs/TREs. If results of the implementation of the facility's initial investigation TRE workplan indicate the need to continue the TRE/TIE, the Permittee(s) shall expeditiously develop a more detailed TRE workplan for submittal to the Regional Water Board Executive Officer within 30 days of completion of the initial investigation TRE. The detailed workplan shall include, but not be limited to:~~
- ~~1.2. The Annual Report in Part XVIII of the MRP shall include:~~
 - ~~a. A full laboratory report for each chronic toxicity test prepared according to the appropriate test methods manual chapter on Report Preparation, including: Further actions to investigate and identify the cause of toxicity;~~
 - ~~i. The chronic toxicity test results for the t-test, reported as "Pass" or "Fail", and the "Percent Effect".~~
 - ~~ii. The dates of sample collection and initiation of each toxicity test.~~
 - ~~iii. Test species with biological endpoint values for each concentration tested.~~
 - ~~iv. Reference toxicant test results.~~
 - ~~v. Water quality measurements for each toxicity test (e.g., pH, dissolved oxygen, temperature, conductivity, hardness, salinity, chlorine, ammonia).~~
 - ~~vi. TRE/TIE testing results.~~
 - ~~vii. A printout of CETIS (Comprehensive Environmental Toxicity Information System) program results.~~

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- ~~a-b.~~ All results for receiving water or outfall effluent parameters monitored concurrently with the toxicity test. Actions the Permittee(s) will take to mitigate the impact of the discharge and prevent the recurrence of toxicity;
- ~~c.~~ TIEs (Phases I, II, and III) that have been completed or are being conducted, by monitoring station. A schedule for these actions.
- ~~b-d.~~ The development, implementation, and results for each TRE Corrective Action Plan, beginning the year following the identification of each pollutant or pollutant class causing chronic toxicity.
- ~~2.~~ The following section summarizes the stepwise approach used in conducting the TRE:
- ~~a.~~ Step 1 includes basic data collection. Data collected for the accelerated monitoring requirements may be used to conduct the TRE;
- ~~b.~~ Step 2 evaluates optimization of the Permittee(s) Minimum Control Measures (MCMs) in reducing the toxicity of the storm water and non-storm water discharges to the MS4 system.
- ~~c.~~ If Steps 1 and 2 are unsuccessful, Step 3 implements a TIE and employment of all reasonable efforts using currently available TIE methodologies. The objective of the TIE shall be to identify the substance or combination of substances causing the observed toxicity;
- ~~d.~~ Assuming successful identification or characterization of the toxicant(s), Step 4 evaluates final effluent treatment options;
- ~~e.~~ Step 5 evaluates options for reducing toxicity of storm water and/or non-storm water discharges to the MS4 system; and,
- ~~f.~~ Step 6 consists of confirmation once a toxicity control method has been implemented.
- ~~3.~~ Many recommended TRE elements parallel source control, pollution prevention, and storm water control program minimum control measures and BMPs. To prevent duplication of efforts, evidence of compliance with those requirements may be sufficient to comply with TRE requirements. By requiring the first steps of a TRE to be accelerated testing and review of the Permittee(s) TRE workplan, a TRE may be ended in its early stages. All reasonable steps shall be taken to reduce toxicity to the required level. The TRE may be ended at any stage if monitoring indicates there are no longer toxicity (six consecutive chronic toxicity test results are less than or equal to 1.0 TUC or six consecutive acute toxicity test results are greater than 90% survival).
- ~~4.~~ The Permittee(s) shall initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. The Permittee(s) shall use the USEPA acute manual, chronic manual, EPA/600/6-91/005F (Phase I)/EPA/600/R-96-054 (for marine), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III), as guidance.

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- ~~5. If a TRE/TIE is initiated prior to completion of the accelerated testing, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE, as determined by the Regional Water Board Executive Officer.~~
- ~~6. Toxicity tests conducted as part of a TRE/TIE may also be used for compliance determination, if appropriate.~~
- ~~7. The Regional Water Board recognizes that toxicity may be episodic and identification of causes of and reduction of sources of toxicity may not be successful in all cases. Consideration of enforcement action by the Regional Water Board will be based, in part, on the Permittee(s)'s actions and efforts to identify and control or reduce sources of consistent toxicity.~~

~~K. Ammonia Removal~~

- ~~1. Except with prior approval from the Executive Officer of the Regional Water Board, ammonia shall not be removed from bioassay samples. The Permittees must demonstrate the receiving water or effluent toxicity is caused by ammonia because of increasing test pH when conducting the toxicity test. It is important to distinguish the potential toxic effects of ammonia from other pH sensitive chemicals, such as certain heavy metals, sulfide, and cyanide. The following may be steps to demonstrate that the toxicity is caused by ammonia and not other toxicants before the Executive Officer would allow for control of pH in the test.

 - ~~a. There is consistent toxicity in the effluent and the maximum pH in the toxicity test is in the range to cause toxicity due to increased pH.~~
 - ~~b. Chronic ammonia concentrations in the effluent are greater than 4 mg/L total ammonia.~~
 - ~~c. Conduct graduated pH tests as specified in the toxicity identification evaluation methods. For example, mortality should be higher at pH 8 and lower at pH 6.~~
 - ~~d. Treat the effluent with a zeolite column to remove ammonia. Mortality in the zeolite treated effluent should be lower than the non-zeolite treated effluent. Then add ammonia back to the zeolite-treated samples to confirm toxicity due to ammonia.~~~~
- ~~2. When it has been demonstrated that toxicity is due to ammonia because of increasing test pH, pH may be controlled using appropriate procedures which do not significantly alter the nature of the effluent, after submitting a written request to the Regional Water Board, and receiving written permission expressing approval from the Executive Officer of the Regional Water Board.~~

~~L. Reporting~~

- ~~1. The Permittee(s) shall submit a full report of the toxicity test results, including any accelerated testing conducted during the month as required by this Order. Test results shall be reported as % survival for acute toxicity test~~

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- ~~results with the self monitoring reports (SMR) for the month in which the test is conducted. If an initial investigation indicates the source of toxicity and accelerated testing is unnecessary, then those results also shall be submitted with the SMR for the period in which the investigation occurred.~~
- ~~2. The full report shall be submitted on or before the end of the month in which the SMR is submitted.~~
 - ~~3. The full report shall consist of:

 - ~~a. The results;~~
 - ~~b. The dates of sample collection and initiation of each toxicity test;~~
 - ~~c. The acute toxicity average limit or chronic toxicity limit or trigger; and~~
 - ~~d. The printout of the ToxCalc or Comprehensive Environmental Toxicity Information System (CETIS) program results.~~~~
 - ~~4. Test results for toxicity tests also shall be reported according to the appropriate manual chapter on Report Preparation and shall be attached to the SMR. Routine reporting shall include, at a minimum, as applicable, for each test:

 - ~~a. Sample date(s);~~
 - ~~b. Test initiation date;~~
 - ~~c. Test species;~~
 - ~~d. End point values for each dilution (e.g., number of young, growth rate, percent survival);~~
 - ~~e. LC₅₀ value(s) in percent effluent;~~
 - ~~f. TU_a values $\left(TU_a = \frac{100}{LC_{50}}\right)$;~~
 - ~~g. IC₁₅, IC₂₅, IC₄₀ and IC₅₀ values in percent effluent;~~
 - ~~h. NOEC value(s) in percent effluent;~~
 - ~~i. TU_c values $\left(TU_c = \frac{100}{NOEC}\right)$;~~
 - ~~j. Mean percent mortality (+standard deviation) after 96 hours in 100% effluent (if applicable);~~
 - ~~k. No Observable Effect Concentration (NOEC) and Lowest Observable Effect Concentration (LOEC) values for reference toxicant test(s);~~
 - ~~l. IC₂₅ value for reference toxicant test(s);~~
 - ~~m. Any applicable charts; and~~
 - ~~n. Available water quality measurements for each test (e.g., pH, dissolved oxygen (D.O.), temperature, conductivity, hardness, salinity, ammonia).~~~~

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~~5. Monitoring results submitted to the Regional Water Board shall be consistent with the requirements identified in Part XVIII.A.5 and Part XVIII.A.7 of this MRP.~~

~~6. The Permittee(s) shall notify this Regional Water Board of any toxicity exceedance of the limit or trigger by telephone or electronically within 24 hours of receipt of the results, followed by a written report within 14 calendar days of receipt of the results. The verbal or electronic notification shall include the exceedance and the plan the Permittee(s) has taken or will take to investigate and correct the cause(s) of toxicity. It may also include a status report on any actions required by the permit, with a schedule for actions not yet completed. If no actions have been taken, the reasons shall be given~~

XIII. SPECIAL STUDIES

- A.** Each Permittee shall be responsible for conducting special studies required in an effective TMDL or an approved TMDL ~~CMP~~ Monitoring Plan applicable to a watershed that transects its political boundary.

XIV. STANDARD MONITORING AND REPORTING PROVISIONS

- A.** All monitoring and reporting activities shall meet the following requirements.
1. Monitoring and Records [40 CFR section 122.41(j)(1)]
 - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - b. Monitoring and Records [40 CFR section 122.41(j)(2)] [California Water Code § 13383(a)]
 - i. Permittees shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the Report of Waste Discharge (ROWD) and application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report, or application. This period may be extended by request of the Regional Water Board Executive Officer or USEPA at any time.
 - c. Monitoring and Records [40 CFR section 122.421(j)(3)]
 - i. Records of monitoring information shall include:
 1. The date, time of sampling or measurements, exact place, weather conditions, and rain fall amount.
 2. The individual(s) who performed the sampling or measurements.
 3. The date(s) analyses were performed.
 4. The individual(s) who performed the analyses.
 5. The analytical techniques or methods used.

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6. The results of such analyses.
 7. The data sheets showing toxicity test results.
- d. Monitoring and Records [40 CFR section 122.241(j)-(4)]. All monitoring, sampling, sample preservation, and analyses must be conducted according to test procedures approved under 40 CFR Part 136 for the analysis of pollutants, unless another test procedure is required under 40 CFR subchapter N or O or is otherwise specified in this Order for such pollutants. If a particular Minimum Level (ML) is not attainable in accordance with procedures set forth in 40 CFR Part 136, the lowest quantifiable concentration of the lowest calibration standard analyzed by a specific analytical procedure may be used instead.
 - e. Monitoring and Records [40 CFR section 122.41(j)(5)]. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this Order shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or both.
- B. All chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory:
 1. Certified for such analyses by an appropriate governmental regulatory agency.
 2. Participated in "Intercalibration Studies" for storm water pollutant analysis conducted by the SMC.⁷
 3. Which performs laboratory analyses consistent with the storm water monitoring guidelines as specified in, the *Stormwater Monitoring Coalition Laboratory Guidance Document*, 2nd Edition R. Gossett and K. Schiff (2007), and its revisions.
 - C. For priority toxic pollutants that are identified in the CTR (65 Fed. Reg. 31682), the MLs published in Appendix 4 of the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California* (SIP) shall be used for all analyses, unless otherwise specified.
 - D. The Monitoring Report shall specify the analytical method used, the Method Detection Level (MDL) and the ML for each pollutant. For the purpose of reporting compliance with numerical limitations, performance goals, and

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⁷ The 'Intercalibration Studies' are conducted periodically by the SMC to establish a consensus based approach for achieving minimal levels of comparability among different testing laboratories for storm water samples to minimize analytical procedure bias. Stormwater Monitoring Coalition Laboratory Document, Technical Report 420 (2004) and subsequent revisions and augmentations.

receiving water limitations, analytical data shall be reported with one of the following methods, as appropriate:

1. An actual numerical value for sample results greater than or equal to the ML.
 2. "Not-detected (ND)" for sample results less than the laboratory's MDL with the MDL indicated for the analytical method used.
 3. "Detected, but Not Quantified (DNQ)" if results are greater than or equal to the laboratory's MDL but less than the ML. The estimated chemical concentration of the sample shall also be reported. This is the concentration that results from the confirmed detection of the substance by the analytical method below the ML value.
- E.** For priority toxic pollutants, if the Permittee can demonstrate that a particular ML is not attainable, in accordance with procedures set forth in 40 CFR Part 136, the lowest quantifiable concentration of the lowest calibration standard analyzed by a specific analytical procedure (assuming that all the method specified sample weights, volumes, and processing steps have been followed) may be used instead of the ML listed in Appendix 4 of the SIP. The Permittee must submit documentation from the laboratory to the Regional Water Board Executive Officer for approval prior to raising the ML for any constituent.
- F. Monitoring Reports [40 CFR § 122.41(I)(4)(ii)].**
1. If a Permittee monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR Part 136, or another method specified in this Order, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the Annual Monitoring Reports.
- G. Monitoring Reports [40 CFR § 122.41(I)(4)(iii)]**
1. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order.
- H.** If no flow occurred during the reporting period, then the Monitoring Report shall so state.
- I.** The Regional Water Board or its Executive Officer, consistent with 40 CFR section 122.41, may approve changes to the Monitoring and Reporting Program, after providing the opportunity for public comment, either:
1. By request of a Permittee or by an interested person after submittal of the Monitoring Report. Such request shall be in writing and filed not later than 60 days after the Monitoring Report submittal date, or
 2. As deemed necessary by the Regional Water Board Executive Officer, following notice to the Permittees.
- J.** Permittees must provide a copy of the Standard Operation Procedures (SOPs) for the Monitoring and Reporting Program No. CI ~~XXXX~~ to the Regional Water Board upon request. The SOP will consist of five elements: Title page, Table of Contents, Procedures, Quality Assurance/ Quality Control (QA/ QC), and

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References. Briefly describe the purpose of the work or process, including any regulatory information or standards that are appropriate to the SOP process, and the scope to indicate what is covered. Denote what sequential procedures should be followed, divided into significant sections; e.g., possible interferences, equipment needed, equipment/instrument maintenance and calibration, personnel qualifications, and safety considerations. Describe QA/ QC activities, and list any cited or significant references.

- K.** When monitoring cannot be performed to comply with the requirements of this Order due to circumstances beyond a Permittee's control, then within two working days, the following shall be submitted to the Regional Water Board Executive Officer:
1. Statement of situation.
 2. Explanation of circumstance(s) with documentation.
 3. Statement of corrective action for the future.
- L.** Results of monitoring from each receiving water or outfall based monitoring station conducted in accordance with the Standard Operating Procedure submitted under Standard Provision 14 of this MRP shall be sent electronically to the Regional Water Board's Storm Water site at MS4stormwaterRB4@waterboards.ca.gov, ~~no later than 90 days from sample collection dates~~ semi-annually, highlighting exceedances of receiving water limitations to implement TMDL provisions and Basin Plan water quality objectives, including California Toxic Rule continuous maximum concentration (CMC) criteria for all test results, with corresponding sampling dates per receiving water monitoring station. The sample data transmitted shall be in the most recent update of the Southern California Municipal Storm Water Monitoring Coalition's (SMC) Standardized Data Transfer Formats (SDTFs).
- M.** When monitoring data provides evidence that a storm water or non-storm water discharge has caused or contributed to an exceedance of a WQBEL, a non-storm water action level, or ~~exhibits aquatic toxicity~~, the Permittee shall submit notify notification to the Regional Water Board in writing electronically within 30 days on a semi-annual basis of the determination and no later than 60 days after receipt of the monitoring data.

XV. ANNUAL REPORT SUBMITTAL TIMELINES

- A.** Each Permittee or group of Permittees shall submit by December 15th of each year beginning in 2013, an Annual Report to the Regional Water Board Executive Officer in the form of a one hard copy and three compact disks (CD) (or equivalent electronic format).

XVI. ANNUAL REPORTING REQUIREMENT OBJECTIVES

B-A. The annual reporting process is intended to meet the following objectives.

1. Present summary information that allows the Regional Water Board to assess:

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- a. Each Permittee’s participation in one or more Watershed Management Programs.
 - b. The impact of each Permittee(s) storm water and non-storm water discharges on the receiving water.
 - c. Each Permittee’s compliance with receiving water limitations, numeric water quality-based effluent limitations, and non-storm water action levels.
 - d. The effectiveness of each Permittee(s) control measures in reducing discharges of pollutants from the MS4 to receiving waters.
 - e. Whether the quality of MS4 discharges and the health of receiving waters is improving, staying the same, or declining as a result watershed management program efforts, and/or TMDL implementation measures, or other Minimum Control Measures.
 - f. Whether changes in water quality can be attributed to pollutant controls imposed on new development, re-development, or retrofit projects.
2. Present detailed data and information in an accessible format to allow the Regional Water Board to verify conclusions presented in a Permittee’s summary information.
 3. Provide the Permittee(s) a forum to discuss the effectiveness of its past and ongoing control measure efforts and to convey its plans for future control measures.
 4. Present data and conclusions in a transparent manner so as to allow review and understanding by the general public.
 5. Focus each Permittee’s reporting efforts on watershed condition, water quality assessment, and an evaluation of the effectiveness of control measures.

XVII. WATERSHED SUMMARY INFORMATION, ORGANIZATION AND CONTENT

- A. Each Permittee shall include the information requested in A.1 through A.3 below in its odd year Annual Report (e.g., Year 1, 3, 5). The requested information shall be provided for each watershed within the Permittee’s jurisdiction. Alternatively, permittees participating in a Watershed Management Program may provide the requested information through the development and submission of a Watershed Management Program plan and any updates thereto.
 1. **Watershed Management Area.** Where a Permittee has individually or collaboratively developed a Watershed Management Program Plan (WMPP) as described in Part VI.C of this Order, reference to the Watershed Management Program plan and any revisions thereto may suffice for baseline information regarding the Watershed Management Area.
 - a. The following information shall be included for each Watershed Management Area within the Permittee(s) jurisdiction, where not included in a WMPP:

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- i. A description of effective TMDLs, applicable WQBELs and receiving water limitations, and implementation and reporting requirements, and compliance dates
 - ii. CWA section 303(d) listings of impaired waters not addressed by TMDLs
 - iii. Results of regional bioassessment monitoring
 - ~~iv. Results of regional Pyrethroid studies, if any~~
 - ~~v. iv.~~ A description of known hydromodifications to receiving waters and a description, including locations, of natural drainage systems
 - ~~vi. v.~~ Description of groundwater recharge areas including number and acres
 - ~~vii. vi.~~ Maps and/or aerial photographs identifying the location of ESAs, ASBS, natural drainage systems, and groundwater recharge areas
- 2. Subwatershed (HUC-12) Description.** The following information shall be included for each Subwatershed (HUC-12) within the Permittee(s) jurisdiction. Where a Permittee has individually or collaboratively developed a WMPP as described in Part VI.C of this Order, reference to the WMPP and any revisions thereto may suffice for baseline information regarding the subwatershed (HUC-12) descriptions, where the required information is already included in the WMPP. The summary information describing the subwatershed shall include the following information:
- a. Description including HUC-12 number, name and a list of all tributaries named in the Basin Plan
 - b. Land Use map of the HUC-12 subwatershed
 - c. 85th percentile, 24-hour rainfall isohyetal map for the subwatershed
 - d. One-year, one-hour storm intensity isohyetal map for the subwatershed
 - e. MS4 map for the subwatershed, including major MS4 outfalls and all low-flow diversions
- 3. Description of the Permittee(s) Drainage Area within the Subwatershed.** Where a Permittee has individually or collaboratively developed a WMPP as described in Part VI.C of this Order, reference to the WMPP and any revisions thereto may suffice for baseline information regarding the Permittee's Drainage Area within the subwatershed (HUC-12), where the required information is already included in the Watershed Management Program. The following information shall be included for each jurisdiction within the Subwatershed (HUC-12):
- a. A subwatershed map depicting the Permittee(s) jurisdictional area and the MS4, including major outfalls (with identification numbers), and low flow diversions (with identifying names or numbers) located, within the Permittee's jurisdiction.

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- b. Provide the estimated baseline percent of effective impervious area (EIA) within the Permittee(s) jurisdictional area as existed at the time that this Order became effective.

XVIII. ANNUAL ASSESSMENT AND REPORTING

- A. Each Permittee or group of Watershed Permittees shall include the information requested in A.1 through A.7 below in its Annual Report. The requested information shall be provided for each watershed within the Permittee’s jurisdiction. Each Permittee shall format its Annual Report to align with the reporting requirements identified in Parts A.1 through A.7 below.

Annual Reports submitted on behalf of a group of Watershed Permittees shall clearly identify all data collected and strategies, control measures, and assessments implemented by each Permittee within its jurisdiction as well as those implemented by multiple Permittees on a watershed scale.

- 1. **Storm Water Control Measures.** Each Permittee shall make all reasonable efforts to determine, compile, analyze, and summarize the following information.

- a. Estimated cumulative change in percent EIA since the effective date of this Order and, if possible, the estimated change in the storm water runoff volume during the 85th percentile storm event.
- b. Summary of New Development/Re-development Projects constructed within the Permittee(s) jurisdictional area during the reporting year.
- c. Summary of Retrofit Projects that reduced or disconnected impervious area from the MS4 during the reporting year.
- d. Summary of other projects designed to intercept storm water runoff prior to discharge to the MS4 during the reporting year.
- e. For the projects summarized above in 1.b through 1.d, estimate the total runoff volume retained on site by the implemented projects.
- f. Summary of actions taken in compliance with TMDL implementation plans or approved Watershed Management Programs to implement TMDL provisions in Part VI.E and Attachments L-R of this Order.
- g. Summary of riparian buffer/wetland restoration projects completed during the reporting year. For riparian buffers include width, length and vegetation type; for wetland include acres restored, enhanced or created.
- h. Summary of other Minimum Control Measures implemented during the reporting year, as the Permittee deems relevant.
- i. Status of all multi-year efforts that were not completed in the current year and will therefore continue into the subsequent year(s). Additionally, if any of the requested information cannot be obtained, the Permittee shall provide a discussion of the factor(s) limiting its acquisition and steps that will be taken to improve future data collection efforts.

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2. Effectiveness Assessment of Storm Water Control Measures

- a. Rainfall summary for the reporting year. Summarize the number of storm events, highest volume event (inches/24 hours), highest number of consecutive days with measureable rainfall, total rainfall during the reporting year compared to average annual rainfall for the subwatershed. Precipitation data shall be obtained from Los Angeles County Department of Public Works rain gauge stations available at <http://www.ladpw.org/wrd/precip/>.
- b. Provide a summary table describing rainfall during storm water outfall and wet-weather receiving water monitoring events. The summary description shall include the date, time that the storm commenced and the storm duration in hours, the highest 15-minute recorded storm intensity (converted to inches/hour), the total storm volume (inches), and the time between the storm event sampled and the end of the previous storm event.
- c. Where control measures were designed to reduce impervious cover or storm water peak flow and flow duration, provide hydrographs or flow data of pre- and post-control activity for the 85th percentile, 24-hour rain event, if available.
- d. For natural drainage systems, develop a reference watershed flow duration curve and compare it to a flow duration curve for the subwatershed under current conditions.
- e. Provide an assessment as to whether the quality of storm water discharges as measured at designed outfalls is improving, staying the same or declining. The Permittee may compare water quality data from the reporting year to previous years with similar rainfall patterns, conduct trends analysis, or use other means to develop and support its conclusions (e.g., use of non-storm water action levels or municipal action levels as provided in Attachment G of this Order).
- f. Provide an assessment as to whether wet-weather receiving water quality within the jurisdiction of the Permittee is improving, staying the same or declining, when normalized for variations in rainfall patterns. The Permittee may compare water quality data from the reporting year to previous years with similar rainfall patterns, conduct trends analysis, draw from regional bioassessment studies, or use other means to develop and support its conclusions.
- g. Status of all multi-year efforts, including TMDL implementation, that were not completed in the current year and will continue into the subsequent year(s). Additionally, if any of the requested information cannot be obtained, the Permittee shall provide a discussion of the factor(s) limiting its acquisition and steps that will be taken to improve future data collection efforts.

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3. Non-Storm Water Control Measures

- a. Estimate the number of major outfalls within the Permittee's jurisdiction in the subwatershed.
- b. Provide the number of outfalls that were screened for significant non-storm water discharges during the reporting year.
- c. Provide the cumulative number of outfalls that have been screened for significant non-storm water discharges since the date this Order was adopted through the reporting year.
- d. Provide the number of outfalls with confirmed significant non-storm water discharge.
- e. Provide the number of outfalls where significant non-storm water discharge was attributed to other NPDES permitted discharges; other authorized non-storm water discharges; or conditionally exempt discharges pursuant to Part III.A of this Order.
- f. Provide the number of outfalls where significant non-storm water discharges were abated as a result of the Permittee's actions.
- g. Provide the number of outfalls where non-storm water discharges was monitored.
- h. Provide the status of all multi-year efforts, including TMDL implementation, that were not completed in the current year and will continue into the subsequent year(s). Additionally, if any of the requested information cannot be obtained, the Permittee shall provide a discussion of the factor(s) limiting its acquisition and steps that will be taken to improve future data collection efforts.

4. Effectiveness Assessment of Non-Storm Water Control Measures

- a. Provide an assessment as to whether receiving water quality within the jurisdiction of the Permittee is impaired, improving, staying the same or declining during dry-weather conditions. Each Permittee may compare water quality data from the reporting year to previous years with similar dry-weather flows, conduct trends analysis, draw from regional bioassessment studies, or use other means to develop and support its conclusions.
- b. Provide an assessment of the effectiveness of the Permittee(s) control measures in effectively prohibiting non-storm water discharges through the MS4 to the receiving water.
- c. Provide the status of all multi-year efforts that were not completed in the current year and will continue into the subsequent year(s).

5. Integrated Monitoring Compliance Report

- a. Provide an Integrated Monitoring Report that summarizes all identified exceedances of (1) outfall-based storm water monitoring data, (2) wet

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weather receiving water monitoring data, (3) dry weather receiving water data, and (4) non-storm water outfall monitoring data against all applicable receiving water limitations, water quality-based effluent limitations, non-storm water action levels, and aquatic toxicity thresholds as defined in Sections XII.F and G of this MRP. All sample results that exceeded one or more applicable thresholds shall be readily identified.

~~b. If Aquatic Toxicity was confirmed, identify a schedule and provide a plan that describes the anticipated process, laboratories, personnel, and procedures to conduct a Toxicity Identification Evaluation (TIE). Part XII.J.4 of this MRP provides references for the guidance manuals that should be used for performing TIEs.~~

~~c.b. Once completely aquatic toxicity was confirmed and a TIE was conducted, identify the toxic chemicals as determined by the TIE. Include all relevant data to allow the Regional Water Board to review the adequacy and findings of the TIE. This shall include, but not be limited to, the sample(s) date, sample(s) start and end time, sample type(s) (flow-weighted composite, grab, or field measurement), sample location(s) as depicted on the map, the parameters, the analytical results, and the applicable limitation.~~

~~d.c. Provide a description of efforts that were taken to mitigate and/or eliminate all non-storm water discharges that exceeded one or more applicable water quality based effluent limitations, non-storm water action levels, or exhibited caused or contributed to Aquatic Toxicity.~~

~~e.d. Provide a description of efforts that were taken to address storm water discharges that exceeded one or more applicable water quality based effluent limitations, or exhibited caused or contributed to Aquatic Toxicity.~~

~~f.e. Where Receiving Water Limitations were exceeded, provide a description of efforts that were taken to determine whether discharges from the MS4 caused or contributed to the exceedances and all efforts that were taken to control the discharge of pollutants from the MS4 to those receiving waters in response to the exceedances.~~

6. Adaptive Management Strategies

a. Identify the most effective control measures and describe why the measures were effective and how other control measures will be optimized based on past experiences.

b. Identify the least effective control measures and describe why the measures were deemed ineffective and how the control measures will be modified or terminated.

c. Identify significant changes to control measures during the prior year and the rationale for the changes.

d. Describe all significant changes to control measures anticipated to be made in the next year and the rationale for the changes. Those changes

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requiring approval of the Regional Water Board or its Executive Officer shall be clearly identified at the beginning of the Annual Report.

- e. Include a detailed description of control measures to be applied to New Development or Re-development projects disturbing more than 50 acres.
- f. Provide the status of all multi-year efforts that were not completed in the current year and will continue into the subsequent year(s).

7. Supporting Data and Information

- a. All monitoring data and associated meta data used to prepare the Annual Report shall be summarized in an Excel spreadsheet and sorted by watershed, subwatershed and monitoring station/outfall identifier linked to the subwatershed map. The data summary must include the date, sample type (flow-weighted composite, grab, field measurement), sample start and stop times, parameter, analytical method, value, and units. The date field must be linked to a database summarizing the weather data for the sampling date including 24-hour rainfall, rainfall intensity, and days since the previous rain event.
- b. Optional. The Permittee may at its option, provide an additional detailed summary table describing control measures that are not otherwise described in the reporting requirements.

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XIX. TMDL REPORTING

Permittees shall report on the progress of TMDL implementation per the schedules identified below in Sections A – G.

A. Reporting Requirements for Santa Clara River WMA TMDLs

Deliverable	Description	Due Date(s)
Santa Clara River Nitrogen Compounds TMDL		
Work Plan	Permittees shall submit a Work Plan to estimate ammonia and nitrogen loadings from the MS4 for approval by the Regional Water Board Executive Officer. The Work Plan must include monitoring for ammonia, nitrate, and nitrite. The Work Plan may include a phased approach wherein the first phase is based on monitoring from the existing mass emission station in the Santa Clara River. The Work Plan must also contain a protocol and a schedule for implementing additional monitoring if necessary. The Work Plan must also propose triggers for conducting source identification and implementing BMPs, if necessary.	<u>Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP, or</u> For an IMP, 9 months after the effective date of this Order; or <u>If a WMP or IMP or CIMP will not be developed then submitted the Work Plan 12 months after the effective date of this Order.</u> For a CIMP, 12 months after the effective date of this Order
Progress Reports	Annual progress reports on the Implementation Plan must be submitted to the Regional Water Board.	December 15, 2013, and annually thereafter
Upper Santa Clara River Chloride TMDL		
Monitoring Results	Permittees shall conduct chloride, TDS, and sulfate monitoring to ensure that water quality objectives are being met.	December 15, 2013, and annually thereafter
Lake Elizabeth, Munz Lake, and Lake Hughes Trash		
Progress Reports	Report compliance with the installation of full capture systems.	December 15, 2013 2 , and annually thereafter
Santa Clara River Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL		
Receiving Water Monitoring Plan and Outfall Monitoring Plan	Permittees must submit a comprehensive in-stream bacteria water quality monitoring plan for the Santa Clara River Watershed. The monitoring plan should include all applicable bacteria water quality objectives and the sampling frequency must be adequate to assess compliance with the geometric mean objectives. At a minimum, at least one sampling station shall be located in each impaired reach. The outfall monitoring plan shall propose an adequate number of representative outfalls to be sampled, a	March 21, 2013, or <u>Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP.</u> For an IMP, 9 months after the effective date of this Order; or

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	sampling frequency, and protocol for enhanced outfall monitoring as a result of an in-stream exceedance. The Monitoring Plans must be approved by the Regional Water Board Executive Officer before the monitoring data can be considered during the implementation of the TMDL. Once the monitoring plan is approved by the Executive Officer, monitoring shall commence within 30 days.	For a CIMP, 12 months after the effective date of this Order
Draft Implementation Plan	Permittees must submit a draft Implementation Plan outlining how each intends to cooperatively or individually achieve compliance with the water quality-based effluent limitations and the receiving water limitations. The Implementation Plan shall include implementation methods, an implementation schedule and proposed milestones.	March 21, 2015
Final Implementation Plan	Permittees must submit a final Implementation Plan.	Six months after receipt of Regional Water Board comments on the draft Implementation Plan.
Board Briefing	Permittees shall provide a verbal update to the Regional Water Board on the progress of TMDL implementation.	March 21, 2017

B. Reporting Requirements for Santa Monica Bay WMA TMDLs

Deliverable	Description	Due Date(s)
Santa Monica Bay Beaches Bacteria TMDL		
Monitoring Results	Monthly data summary reports shall be submitted to the Regional Water Board by the last day of each month for data collected during the previous month. Two agencies will submit the monthly reports on behalf of all Permittees: City of Los Angeles, Department of Public Works, Bureau of Sanitation, Environmental Monitoring Division (on behalf of Jurisdictional Groups 1 through 6, 8, and 9); and Los Angeles County Sanitation Districts (on behalf of Jurisdictional Group 7).	Monthly on the last day of the month.
Santa Monica Bay Nearshore and Offshore Debris TMDL		
Trash Monitoring and Reporting Plan (TMRP)	Permittees shall develop a Trash Monitoring and Reporting Plan (TMRP) for Regional Water Board Executive Officer approval that describes the methodologies that will be used to assess and monitor trash in their responsible areas within the Santa Monica Bay WMA or along Santa Monica Bay. The TMRP shall include a plan to establish a site specific trash baseline water quality-based effluent limitation if Permittees elect to not use the default baseline effluent limitation. Requirements for the TMRP shall include, but are not limited to, assessment and quantification of trash collected from source areas in the Santa Monica Bay WMA, and shoreline of the Santa Monica Bay. The monitoring plan shall provide details on the frequency, location, and reporting format. Permittees shall propose a metric (e.g., weight, volume, pieces of trash) to measure the amount of trash discharged from their jurisdictional areas.	September 20, 2012; <u>or</u> <u>Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP, or</u> <u>If a WMP or IMP or CIMP will not be developed then submitted the TMRP 12 months after the effective date of this Order.</u> For an IMP, 9 months after the effective date of this Order; or For a CIMP, 12 months after the effective date of this Order
Implement TMRP	Implement TMRP	<u>If TMRP is submitted by September 20, 2012, then implement the TMRP 30 days 6 months from receipt of letter of approval from Regional Water Board Executive Officer, or the date a plan is established by the Executive Officer; or</u> <u>If an IMP or CIMP is submitted, then monitoring shall commence within 30 days after approval of the IMP or CIMP plan by the Executive Officer.</u>
Plastic Pellets Monitoring and Reporting Plan	Permittees identified as responsible jurisdictions and agencies for point sources of trash in the Santa Monica Bay Debris TMDL and in the existing Malibu Creek and Ballona Creek Trash TMDLs, including the Los Angeles County Flood Control District, shall either prepare a Plastic	September 20, 2013, or <u>Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP.</u>

	<p>Pellet Monitoring and Reporting Plan (PMRP) or demonstrate that a PMRP is not required.</p> <p>The PMRP shall include protocols for a timely and appropriate response to possible plastic pellets spills within a Permittees' jurisdictional area, and a comprehensive plan to ensure that plastic pellets are contained.</p>	<p>For an IMP, 9 months after the effective date of this Order; or</p> <p>For a CIMP, 12 months after the effective date of this Order</p>
Implement PMRP	Implement PMRP	March 20, 2016
Submit results of implementing TMRP and PMRP	Submit results of implementing TMRP and PMRP, recommend trash baseline water quality-based effluent limitations, and propose prioritization of Full Capture System installation or implementation of other measures to attain the required trash and plastic pellet reduction.	December 15, 2013, and annually thereafter
Santa Monica Bay TMDL for DDTs and PCBs (USEPA established)		
Monitoring and Reporting Plan	<p>Permittees shall develop a Monitoring and Reporting Plan for Regional Water Board Executive Officer approval that describes the methodologies that will be used to monitor and assess sediment for DDT and PCBs. The monitoring design and assessment framework should be designed to provide credible estimates of the total mass loadings to the Santa Monica Bay. Monitoring should be conducted on a coordinated watershed-wide basis using sufficiently sensitive analytical methods for DDT and PCBs. Monitoring sediments in catch basins designed for pollutant prevention may be a way for Permittees to quantify load reductions to the Santa Monica Bay.</p>	<p><u>Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP, or</u></p> <p><u>If a WMP or IMP or CIMP will not be developed then submitted the Monitoring and Reporting Plan 12 months after the effective date of this Order.</u></p> <p>For an IMP, 9 months after the effective date of this Order; or</p> <p>For a CIMP, 12 months after the effective date of this Order</p>
Malibu Creek and Lagoon Bacteria TMDL		
Monitoring Results	Monthly data summary reports shall be submitted to the Regional Water Board by the last day of each month for data collected during the previous month.	Monthly on the last day of the month.
Malibu Creek Watershed Trash TMDL		
Submit results of TMRP	Submit results of Trash Monitoring and Reporting Plan (TMRP), recommend trash baseline water quality-based effluent limitations, and propose prioritization of Full Capture System installation or implementation of other measures to attain the required trash.	December 15, 2013, and annually thereafter
Malibu Creek Watershed Nutrients TMDL (USEPA established)		
Monitoring and Reporting Plan	<p>Permittees shall develop a Monitoring and Reporting Plan for Regional Water Board Executive Officer approval that demonstrates compliance with the water quality-based effluent limitations for total nitrogen and total phosphorus.</p>	<p><u>Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP, or</u></p> <p><u>If a WMP or IMP or CIMP will not be developed then submitted the Monitoring and Reporting Plan 12 months after the effective date of this Order.</u></p> <p>For an IMP, 9 months after the effective date of</p>

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		this Order; or For a CIMP, 12 months after the effective date of this Order
Ballona Creek Trash TMDL		
Annual Progress Reports	Report compliance with the required percent reduction of trash discharged to Ballona Creek.	December 15, 2013 2 , and annually thereafter.
Ballona Creek Estuary Toxic Pollutants TMDL		
Annual Monitoring Report	Permittees shall submit annual monitoring reports, which include compliance summary tables, to the Regional Water Board.	December 15, 2013 2 , and annually thereafter.
Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL		
Monitoring Results	Monthly data summary reports shall be submitted to the Regional Water Board by the last day of each month for data collected during the previous month.	Monthly on the last day of the month.
Ballona Creek Metals TMDL		
Annual Monitoring Report	Permittees shall submit annual monitoring reports, which include compliance summary tables, to the Regional Water Board.	December 15, 2013 2 , and annually thereafter.
Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation (USEPA established)		
Monitoring and Reporting Plan	Permittees shall develop a Sediment Monitoring and Reporting Plan for Regional Water Board Executive Officer approval to quantify the annual loading of sediment from the Ballona Creek Watershed and the impact of the sediment loading into the Ballona Creek Wetlands.	<u>Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP, or</u> <u>If a WMP or IMP or CIMP will not be developed then submitted the Monitoring and Reporting Plan 12 months after the effective date of this Order.</u> For an IMP, 9 months after the effective date of this Order; or For a CIMP, 12 months after the effective date of this Order
Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL		
Monitoring Results	Monthly data summary reports shall be submitted to the Regional Water Board by the last day of each month for data collected during the previous month.	Monthly on the last day of the month.
Marina del Rey Harbor Toxic Pollutants TMDL		
Annual Monitoring Report	Permittees shall submit annual monitoring reports, which include compliance summary tables, to the Regional Water Board.	December 15, 2013 2 , and annually thereafter.

C. Reporting Requirements for Dominguez Channel and Greater Harbors Waters WMA TMDLs

Deliverable	Description	Due Date(s)
Los Angeles Harbor Bacteria TMDL		
Monitoring Results	Monthly data summary reports shall be submitted to the Regional Water Board by the last day of each month for data collected during the previous month.	Monthly on the last day of the month.
Machado Lake Trash TMDL		
Progress Reports	Report compliance with the required percent reduction of trash discharged to Machado Lake.	December 15, 2013 2 , and annually thereafter.
Machado Lake Nutrient TMDL		
Annual Monitoring Report	The Cities of Palos Verdes Estates, Ranch Palos Verdes, Rolling Hills and Rolling Hills Estates shall submit annual monitoring reports that demonstrate compliance with the concentration-based water quality-based effluent limitations.	December 15, 2013 2 , and annually thereafter.
Annual Monitoring Report	The City of Los Angeles shall submit annual monitoring reports that demonstrate compliance with the Lake Water Quality Management Plan and reduces the external nutrient loading to attain the receiving water limitations for Machado Lake.	December 15, 2013 2 , and annually thereafter.
Annual Monitoring Report	The City of Carson shall submit annual monitoring reports that demonstrate compliance with the concentration-based water quality-based effluent limitations.	December 15, 2013 2 , and annually thereafter.
Annual Monitoring Report	The County of Los Angeles shall submit annual monitoring reports that demonstrate compliance with the mass-based water quality-based effluent limitations.	December 15, 2013 2 , and annually thereafter.
Annual Monitoring Report	The City of Torrance shall submit annual monitoring reports that demonstrate compliance with the mass-based water quality-based effluent limitations.	December 15, 2013, and annually thereafter.
Annual Monitoring Report	The Cities of Lomita and Redondo Beach shall submit annual monitoring reports that demonstrate compliance with the concentration-based water quality-based effluent limitations.	December 15, 2013, and annually thereafter.
Machado Lake Pesticides and PCBs TMDL		
Monitoring and Reporting Plan and Quality Assurance Project Plan	Permittees shall develop a Monitoring and Reporting Plan (MRP) and Quality Assurance Project Plan (QAPP) for Regional Water Board Executive Officer approval. The MRP shall demonstrate compliance and non-compliance with the water quality-based effluent limitations as part of reports submitted to the Regional Water Board. The QAPP shall include protocols for sample collection, standard analytical procedures, and	<u>The deadline for Permittees assigned both WLAs and LAs to submit one document to address both the WLA and LA monitoring requirements and implementation activities shall be September 20, 2013, September 20, 2012, or</u>

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	laboratory certification. All samples shall be collected in accordance with <u>applicable SWAMP</u> protocols.	<p><u>Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP, or</u></p> <p><u>If a WMP or IMP or CIMP will not be developed then submitted the work plan 12 months after the effective date of this Order.</u></p> <p><u>For an IMP, 9 months after the effective date of this Order; or</u></p> <p><u>For a CIMP, 12 months after the effective date of this Order</u></p>
Begin Phase 1 Monitoring	Begin Phase 1 Monitoring as outlined in the approved MRP and QAPP.	30 days from date of Executive Officer approval of MRP and QAPP
Phase 1 Monitoring	Conduct Phase 1 Monitoring for 2 years.	2 year monitoring period
Draft Implementation Plan	Based on the results of Phase 1 Monitoring, Permittees shall submit an Implementation Plan to attain water quality-based effluent limitations or document that water quality-based effluent limitations are attained.	6 months from completion of Phase 1 Monitoring
Final Implementation Plan	Permittees shall submit Final Implementation Plan.	1 year from completion of Phase 1 Monitoring
Implementation	Permittees shall begin implementation actions to attain water quality-based effluent limitation, as necessary.	30 days from date of Implementation Plan approval
Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL		
Monitoring and Reporting Plan and Quality Assurance Project Plan	Permittees shall develop Monitoring and Reporting Plans (MRPs) and Quality Assurance Project Plans (QAPPs) for Regional Water Board Executive Officer approval in accordance with the TMDL. The MRPs shall include a requirement that the responsible parties report compliance and non-compliance with water quality-based effluent limitations as part of annual reports submitted to the Regional Water Board. The QAPPs shall include protocols for sample collection, standard analytical procedures, and laboratory certification. All samples shall be collected in accordance with <u>applicable SWAMP</u> protocols.	<p>November 23, 2013, or</p> <p><u>Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP.</u></p> <p><u>For an IMP, 9 months after the effective date of this Order; or</u></p> <p><u>For a CIMP, 12 months after the effective date of this Order</u></p>
Monitoring Plan	Permittees shall implement monitoring as outlined in the approved MRP and QAPP.	30 days after MRP and QAPP is approved by Regional Water Board Executive Officer.
Annual Monitoring Reports	Permittees shall submit annual monitoring reports to the Regional Water Board.	December 15, 2013, and annually thereafter.
Implementation Plan and Contaminated Sediment Management Plan (CSMP)	Permittees in the Dominguez Channel and Greater Harbors Waters Watershed Management Area shall develop and submit an Implementation Plan and Contaminated Sediment Management Plan (CSMP). The CSMP shall include concrete milestones with numeric estimates of load reductions or removal, including milestones for remediating hot spots, including but	<p><u>Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP, or</u></p> <p><u>If a WMP or IMP or CIMP will not be developed then submitted the Implementation Plan and CSMP</u></p>

	not limited to Dominguez Channel Estuary, Consolidated Slip and Fish Harbor, for Regional Water Board Executive Officer approval.	<u>12 months</u> 1 year after the effective date of this Order.
Report of Implementation	Permittees in the Los Angeles River and San Gabriel River Watersheds shall submit a Report of Implementation to the Regional Water Board.	December 15, 2013, and annually thereafter
Implementation Reports	Permittees shall submit annual implementation reports to the Regional Water Board. Report on implementation progress and demonstrate progress toward meeting the water quality-based effluent limitations.	December 15, 2014, and annually thereafter
Updated Implementation Plan and CSMP	Permittees in the Dominguez Channel and Greater Harbors Waters Watershed Management Area shall submit an updated Implementation Plan and Contaminated Sediment Management Plan (CSMP).	March 23, 2017

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D. Reporting Requirements for the Los Angeles River WMA TMDLs

Deliverable	Description	Due Date(s)
Los Angeles River Watershed Trash TMDL		
Reporting	Report compliance with the installation of full capture systems.	December 15, 2013 2 , and annually thereafter.
Los Angeles River Nitrogen Compounds and Related Effects TMDL		
Monitoring Work Plan	Submittal of a Monitoring Work Plan by MS4 p er mittees to estimate nitrogen loadings associated with runoff loads from the storm drain system for approval by the Executive Officer of the Regional Water Board. The Work Plan will include monitoring for ammonia, nitrate, and nitrite. The Work Plan may include a phased approach wherein the first phase is based on monitoring from the existing mass emission station in the Los Angeles River. The Work Plan will also contain protocol and a schedule for implementing additional monitoring if necessary. The Work Plan will also propose triggers for conducting source identification and implementing BMPs, if necessary.	<u>Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP, or</u> <u>If a WMP or IMP or CIMP will not be developed then submitted the Monitoring Work Plan 12 months after the effective date of this Order.</u> For an IMP, 9 months after the effective date of this Order; or For a CIMP, 12 months after the effective date of this Order
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Los Angeles River and Tributaries Metals TMDL		
Annual Monitoring Report	Permittees shall submit annual monitoring reports as detailed in the approved coordinated monitoring plan to the Regional Water Board.	December 15, 2013 2 , and annually thereafter.
Los Angeles River Watershed Bacteria TMDL		
Bacteria Coordinated Monitoring Plan	Permittees shall submit a Bacteria Coordinated Monitoring Plan (CMP), which shall be submitted for Regional Water Board Executive Officer approval. The CMP shall detail: the number and location of sites, including at least one monitoring station per each river segment, reach and tributary addressed under this TMDL; measurements and sample collection methods; and monitoring frequencies. Permittees may also include in the CMP, for Executive Officer consideration, other meteorological stations which may be more representative of the existing hydrology and climate. Each segment, reach, and tributary addressed under this TMDL shall be monitored at least monthly until the subject segment, reach or tributary is at the end of the execution part of its first implementation phase (i.e. 7 years after beginning the segment or tributary-specific phase), to determine compliance with the interim water quality based	March 23, 2013, or <u>Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP.</u> For an IMP, 9 months after the effective date of this Order; or For a CIMP, 12 months after the effective date of this Order

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	<p>effluent limitations. Each segment, reach and tributary addressed under this TMDL shall be monitored at least weekly to determine compliance with the instream targets after the first implementation phase.</p> <p>For parties pursuing a Load Reduction Strategy (LRS), intensive outfall monitoring will be conducted before and after implementation of the LRS. Pre-LRS monitoring will be used to estimate the <i>E. coli</i> loading from MS4 outfalls to the segment or tributary, and identify the outfalls and types of implementation actions that are expected to be necessary to attain the water quality based limits. Post-LRS monitoring will be used to evaluate compliance with the interim water quality based limits and to plan for additional implementation actions to meet the final water quality based limits, in a second implementation phase, if necessary.</p> <p>When applicable, outfall monitoring shall including <i>E. coli</i> by USEPA- approved methods and flow rate at <i>all</i> MS4 outfalls (“snapshots”) that are discharging to a segment or tributary or across jurisdictional boundaries during a given monitoring event. For each LRS, at least six (6) snapshots shall be conducted for pre-LRS monitoring, and at least three (3) snapshots shall be conducted for post- LRS monitoring. For MS4s that choose to follow a non-LRS implementation approach, but choose to demonstrate compliance with Equivalent Conditions, at least six (6) snapshots shall be conducted.</p>	
Implement CMP	Permittees shall begin implementation actions to attain water quality-based effluent limitation, as necessary.	30 days after approval of the CMP
Annual Monitoring Report	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Implementation Plan	Permittees shall submit an Implementation Plan for wet weather with interim milestones for approval of the Regional Water Board Executive Officer.	March 23, 2022
<u>Legg Lake Trash TMDL</u>		
<u>TMRP Reports MFAC</u>	<u>Report compliance with the approved MFAC program.</u>	<u>December 15, 2013, and annually thereafter</u>
<u>Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL</u>		
Compliance Monitoring	<p>To evaluate compliance with numeric targets, monitoring shall take place at existing monitoring sites as well as any new monitoring locations in the ambient water. For beach monitoring locations, daily or systematic weekly sampling in the wave wash at all major drains and creeks, existing monitoring stations at beaches without storm drains, and freshwater outlets is recommended to evaluate compliance. At all beach locations, samples should be taken at ankle depth and on an incoming wave, consistent with section 7961(b) of title 17 of the California Code of Regulations. At locations where there is a freshwater outlet, during wet weather, samples should be taken as close</p>	<p><u>Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP, or</u></p> <p><u>If a WMP or IMP or CIMP will not be developed then submitted the Monitoring Plan 12 months after the effective date of this Order.</u></p>

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	<p>as possible to the wave wash, and no further away than 10 meters down current of the storm drain or outlet.</p> <p>A robust monitoring program shall be developed for the LAR Estuary. Available data includes bi-weekly monitoring from May through September of 2009, and 2010. Monitoring shall be expanded to include year round monitoring requirements, and at least three monitoring locations within the Estuary. We understand that adequate data to establish a reference estuary approach is currently not available. If in the future, adequate data from reference estuary studies become available, it may be appropriate to consider a reference estuary approach to evaluate compliance with these TMDLs.</p>	
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<p>For an IMP, 9 months after the effective date of this Order; or</p> <p>For a CIMP, 12 months after the effective date of this Order</p>		
Annual Monitoring Report	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Los Angeles Area Lakes TMDLs		
Lake Calabastas Nutrient TMDL		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and chlorophyll a. Measurements of the temperature, DO, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement. All parameters must meet target levels at half the Secchi depth. DO and pH must meet target levels from the surface of the water to 0.3 meters above the lake bottom. Additionally, in order to accurately calculate compliance with water quality based limits to the lake expressed in yearly loads, monitoring should include flow estimation or monitoring as well as the water quality concentration measurements.	At a minimum twice during summer months and once during winter.
Supplemental Water Monitoring	At Lake Calabastas, water quality based limits are assigned to supplemental water additions. This source should be monitoring for at minimum; ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and total dissolved solids.	Once a year during the summer months (critical conditions).
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes for at minimum: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and total dissolved	Twice a year.

	solids.	
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013 2 , and annually thereafter.
Echo Park Lake Nutrient TMDL		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids, total dissolved solids and chlorophyll a. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement. All parameters must meet target levels at half the Secchi depth. DO and pH must meet target levels from the surface of the water to 0.3 meters above the lake bottom. Additionally, in order to accurately calculate compliance with water quality based limits to the lake expressed in yearly loads, monitoring should include flow estimation or monitoring as well as the water quality concentration measurements.	At a minimum twice during summer months and once during winter.
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes for at minimum: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and total dissolved solids.	Twice a year.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013 2 , and annually thereafter.
Echo Park Lake PCBs and Organochlorine Pesticide TMDLs		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: total suspended sediments, total PCBs, total chlordane, and dieldrin; as well as the following in-lake sediment parameters: total organic carbon, total PCBs, total chlordane, and dieldrin. Environmentally relevant detection limits should be used (i.e., detection limits lower than applicable target), if available at a commercial laboratory. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement.	December 15, 2013, and annually thereafter.
Fish Tissue Monitoring	Monitoring of fish tissue. For the OC pesticides and PCBs TMDLs, a demonstration that fish tissue targets have been met in any given year must at minimum include a composite sample of skin off fillets from at least five largemouth bass each measuring at least 350mm in length.	At least every three years.
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes. Sampling should be designed to collect sufficient volumes of suspended solids to allow for the analysis of at minimum: total organic carbon, total suspended solids, total PCBs, total chlordane, and dieldrin. Measurements of the	Once a year during a wet weather event.

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	temperature, dissolved oxygen, pH and electrical conductivity should also be taken.	
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Echo Park Lake Trash TMDL		
Compliance Monitoring	Responsible jurisdictions should monitor the trash quantity deposited in the vicinity of Echo Park Lake as well as on the waterbody to comply with the TMDL target and to understand the effectiveness of various implementation efforts. The Rapid Trash Assessment Method is recommended.	Quarterly.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Legg Lake System Nutrient TMDL		
Compliance Monitoring	<u>At a minimum, compliance monitoring should measure the following in-lake water quality parameters: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids, total dissolved solids and chlorophyll <i>a</i>. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement. All parameters must meet target levels at half the Secchi depth. DO and pH must meet target levels from the surface of the water to 0.3 meters above the lake bottom. Additionally, in order to accurately calculate compliance with water quality based limits to the lake expressed in yearly loads, monitoring should include flow estimation or monitoring as well as the water quality concentration measurements.</u>	<u>At a minimum twice during summer months and once during winter.</u>
Stormwater Monitoring	<u>Stormwater sources should be measured near the point where they enter the lakes for at minimum: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and total dissolved solids.</u>	<u>Twice a year.</u>
Reporting	<u>Annual reporting of monitoring results to the Regional Water Board.</u>	<u>December 15, 2013, and annually thereafter.</u>
Peck Road Park Lake Nutrient TMDL		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids, total dissolved solids and chlorophyll <i>a</i> . Measurements of the temperature, DO, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement. All parameters must meet target levels at half the Secchi depth. Deep lakes, such as Peck Road Park Lake, must meet the DO and pH targets in the water column from the surface to 0.3 meters above the bottom of the lake when the lake is not stratified. However,	At a minimum twice during summer months and once during winter.

	when stratification occurs (i.e., a thermocline is present) then the DO and pH targets must be met in the epilimnion, the portion of the water column above the thermocline. Additionally, in order to accurately calculate compliance with water quality based limits to the lake expressed in yearly loads, monitoring should include flow estimation or monitoring as well as the water quality concentration measurements.	
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes for at minimum: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and total dissolved solids.	Twice a year.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013 2 , and annually thereafter.
Peck Road Park Lake PCBs and Organochlorine Pesticide TMDLs		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: total suspended sediments, total PCBs, total chlordane, total DDTs, and dieldrin; as well as the following in-lake sediment parameters: total organic carbon, total PCBs, total chlordane, total DDTs, and dieldrin. Environmentally relevant detection limits should be used (i.e., detection limits lower than applicable target), if available at a commercial laboratory. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement.	December 15, 2013, and annually thereafter.
Fish Tissue Monitoring	Monitoring of fish tissue. For the OC pesticides and PCBs TMDLs, a demonstration that fish tissue targets have been met in any given year must at minimum include a composite sample of skin off fillets from at least five common carp each measuring at least 350mm in length.	At least every three years.
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes. Sampling should be designed to collect sufficient volumes of suspended solids to allow for the analysis of at minimum: total organic carbon, total suspended solids, total PCBs, total chlordane, total DDTs, and dieldrin. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken.	Once a year during a wet weather event.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013 2 , and annually thereafter.
Peck Road Park Lake Trash TMDL		
Compliance Monitoring	Responsible jurisdictions should monitor the trash quantity deposited in the vicinity of Peck Road Park Lake as well as in the waterbody to comply with the TMDL target and to understand the effectiveness of various implementation efforts. The Rapid Trash Assessment Method is recommended.	Quarterly.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013 2 , and annually

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E. Reporting Requirements for San Gabriel River WMA TMDLs

Deliverable	Description	Due Date(s)
San Gabriel River and Impaired Tributaries Metals and Selenium TMDL		
Coordinated Monitoring Plan	<p>Permittees shall develop a Coordinated Monitoring Plan, to be approved by the Regional Water Board Executive Officer, which includes both TMDL effectiveness monitoring and ambient monitoring. The ambient monitoring program shall contain monitoring in all reaches and major tributaries of the San Gabriel River, including but not limited to additional dry- and wet-weather monitoring in the San Gabriel River Reaches 4 and 5 and Walnut Creek, additional dry-weather monitoring in San Gabriel River Reach 2, and additional wet-weather monitoring in San Jose Creek, San Gabriel River Reaches 1 and 3, and the Estuary. Sediment samples shall be collected semi-annually in the Estuary and analyzed for sediment toxicity resulting from copper, lead, selenium, and zinc.</p> <p>The TMDL effectiveness monitoring shall demonstrate the effectiveness of the phased implementation schedule for reducing pollutant loads to achieve the dry- and wet-weather water quality based effluent limitations. Monitoring stations specified for the ambient monitoring program may be used for the TMDL effectiveness monitoring. The final dry-weather monitoring stations shall be located in San Jose Creek Reach 1 and the Estuary. The final wet-weather TMDL effectiveness monitoring stations may be located at the existing Los Angeles County Department of Public Works mass emission sites in San Gabriel River Reach 2 and Coyote Creek.</p> <p>Permittees shall sample once per month, during dry-weather conditions, at each proposed TMDL effectiveness monitoring location. Permittees shall sample at least 4 wet-weather events where flow meets wet-weather conditions (260 cfs in San Gabriel River Reach 2 and 156 cfs in Coyote Creek) in a given storm season (November to March), unless there are fewer than 4 wet-weather events, at each proposed TMDL effectiveness monitoring location. Permittees are encouraged to coordinate with the San Gabriel watershed-wide monitoring program to avoid duplication and leverage resources.</p>	<p><u>Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP, or</u></p> <p><u>If a WMP or IMP or CIMP will not be developed then submitted the Coordinated Monitoring Plan 12 months after the effective date of this Order.</u></p>

~~For an IMP, 9 months after the effective date of this Order; or~~

~~For a CIMP, 12 months after the effective date of this Order~~

Annual Monitoring Report	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013 2 , and
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		annually thereafter.
Implementation Plan	Permittees shall submit an Implementation Plan outlining how to achieve compliance with the water quality based effluent limitations, for approval of the Regional Water Board Executive Officer. The Plan shall include implementation methods, an implementation schedule, and proposed milestones.	1 year after the effective date of this Order
Legg Lake Trash TMDL		
TMRP Reports	Report compliance with the installation of full capture systems.	December 15, 2012, and annually thereafter
TMRP Reports MFAC	Report compliance with the approved MFAC program.	December 15, 2012, and annually thereafter
Los Angeles Area Lakes TMDLs		
Legg Lake System Nutrient TMDL		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids, total dissolved solids and chlorophyll <i>a</i>. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement. All parameters must meet target levels at half the Secchi depth. DO and pH must meet target levels from the surface of the water to 0.3 meters above the lake bottom. Additionally, in order to accurately calculate compliance with water quality based limits to the lake expressed in yearly loads, monitoring should include flow estimation or monitoring as well as the water quality concentration measurements.	At a minimum twice during summer months and once during winter.
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes for at minimum: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and total dissolved solids.	Twice a year.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013², and annually thereafter.
Puddingstone Reservoir Nutrient TMDL		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and chlorophyll <i>a</i> . Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement. All parameters must meet target levels at half the Secchi depth. DO and pH must meet target levels from the surface of the water to 0.3 meters above the lake bottom when the lake is not stratified. However, when stratification occurs (i.e., a thermocline is present) then the DO and pH targets must be met in the epilimnion, the portion of the water column above the thermocline. Additionally, in order to accurately calculate compliance with water quality based limits	At a minimum twice during summer months and once during winter.

	to the lake expressed in yearly loads, monitoring should include flow estimation or monitoring as well as the water quality concentration measurements.	
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes for at minimum: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and total dissolved solids.	Twice a year.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013 ² , and annually thereafter.
Puddingstone Reservoir Mercury TMDL		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: total mercury, methylmercury, chloride, sulfate, total organic carbon, alkalinity, total suspended solids, and total dissolved solids; as well as the following in-lake sediment parameters: total mercury, dissolved methylmercury, total organic carbon, total solids and sulfate. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement. Additionally, in order to accurately calculate compliance with allocations expressed in yearly loads, monitoring should include flow estimation or monitoring as well as water quality concentration measurements.	Twice a year.
Fish Tissue Monitoring	Monitoring should include monitoring of largemouth bass (325-375mm in length) fish tissue (skin-off fillets) for mercury concentration.	At least every three years.
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes for at minimum: total mercury, methyl mercury, chloride, sulfate, total organic carbon, alkalinity, total suspended solids, and total dissolved solids.	Twice a year.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013 ² , and annually thereafter.
Puddingstone Reservoir PCBs and Organochlorine Pesticide TMDLs		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: total suspended sediments, total PCBs, total chlordane, dieldrin, and total DDTs; as well as the following in-lake sediment parameters: total organic carbon, total PCBs, total chlordane, dieldrin, and total DDTs. Environmentally relevant detection limits should be used (i.e., detection limits lower than applicable target), if available at a commercial laboratory. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement.	Annually.
Fish Tissue Monitoring	Monitoring of fish tissue. For the OC pesticides and PCBs TMDLs a demonstration that fish tissue targets have been met in any given year must at minimum include a composite sample of skin off fillets from at least five common carp each measuring at least 350mm in length.	At least every three years.
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes. Sampling should be designed to collect sufficient volumes of suspended solids to allow	Once a year during a wet weather event.

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	for the analysis of at minimum: total organic carbon, total suspended solids, total PCBs, total chlordane, dieldrin, and total DDTs. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken.	
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 201 3 ² , and annually thereafter.

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F. Reporting Requirements for Los Cerritos Channel WMA TMDLs

Deliverable	Description	Due Date(s)
Los Cerritos Channel Metals TMDL		
Coordinated Monitoring Plan	<p>Permittees shall develop a Coordinated Monitoring Plan, to be approved by the Regional Water Board Executive Officer, which includes both TMDL effectiveness monitoring and ambient monitoring. The ambient monitoring program shall be developed to track trends in water quality improvements in Los Cerritos Channel; to provide background information on hardness values; and the partitioning of metals between the total recoverable and dissolved fraction.</p> <p>TMDL effectiveness monitoring shall demonstrate the effectiveness of the phased implementation schedule for reducing pollutant loads to achieve the water quality based effluent limitations. Monitoring stations specified for the ambient monitoring program may be used for the TMDL effectiveness monitoring. Permittees shall sample at least 4 wet-weather events where flow meets wet-weather conditions (>23 cfs in Los Cerritos Channel above the tidal prism) in a given storm season.</p>	<p><u>Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP, or</u></p> <p><u>If a WMP or IMP or CIMP will not be developed then submitted the Coordinated Monitoring Plan 12 months after the effective date of this Order.</u></p> <p>For an IMP, 9 months after the effective date of this Order; or</p> <p>For a CIMP, 12 months after the effective date of this Order</p>
Annual Monitoring Report	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Implementation Plan	Permittees shall submit an Implementation Plan outlining how to achieve compliance with the water quality based effluent limitations, for approval of the Regional Water Board Executive Officer. The Plan shall include implementation methods, an implementation schedule, and proposed milestones.	1 year after the effective date of this Order
Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL		
Monitoring	Water column and sediment samples will be collected at the outlet of the storm drains discharging to the lagoon, while water column, sediment, and fish tissue samples will be collected in the West Arm, Central Arm, North Arm, at the outlet of the lagoon to Marine Stadium during an incoming tide, and at the outfall of Termino Avenue Drain to Marine Stadium as specified in the Colorado Lagoon TMDL Monitoring Plan (CLTMP).	6 months after Regional Water Board Executive Officer approves the CLTMP. February 1, 2013
Annual Monitoring Reports	Permittees shall submit annual monitoring reports to the Regional Water Board. All compliance monitoring must be conducted in conjunction with a Regional Water Board approved Quality Assurance Project Plan.	December 15, 2013, and annually thereafter.
Implementation Progress	Permittees shall submit annual progress reports on the status of implementation actions performed under the TMDL. The plan shall contain mechanisms for demonstration progress toward meeting the water quality based effluent limitations.	December 15, 2013, and annually thereafter.

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G. Reporting Requirements for Middle Santa Ana River WMA TMDL

Deliverable	Description	Due Date(s)
Middle Santa Ana River Watershed Bacteria Indicator TMDL		
Bacterial Indicator Water Quality Monitoring Plan	Permittees shall develop and submit for approval by the Executive Officer of the Regional Water Board a Bacterial Indicator Water Quality Monitoring Plan in accordance with the TMDL.	<p><u>Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP, or</u></p> <p><u>If a WMP or IMP or CIMP will not be developed then submitted the Monitoring Plan 12 months after the effective date of this Order.</u></p> <p>For an IMP, 9 months after the effective date of this Order; or</p> <p>For a CIMP, 12 months after the effective date of this Order</p>
Bacterial Indicator Urban Source Evaluation Plan	Permittees shall develop and submit for approval by the Regional Water Board a Bacterial Indicator Urban Source Evaluation Plan. This plan shall include steps needed to identify specific activities, operations, and processes in urban areas that contribute bacterial indicators to San Antonio Channel. The plan shall also include a proposed schedule for completion of each of the steps identified.	1 year after the effective date of this Order
Progress Reports	Annual progress reports on implementation shall be submitted to the Regional Water Board.	December 15, 2013, and annually thereafter.

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I, Samuel Unger, Executive Officer, do hereby certify that this Monitoring and Reporting Program is a full, true, and correct copy of the MRP adopted by the California Regional Water Quality Control Board, Los Angeles Region, on <Adoption Date>.

Samuel Unger, P.E.
Executive Officer

Date: _____ 2012

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ATTACHMENT G. NON-STORM WATER ACTION LEVELS AND MUNICIPAL ACTION LEVELS

I. SANTA CLARA RIVER WATERSHED AREA

Table G-1. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or less than 1 ppt)

Parameter	Units	Average Monthly	Daily Maximum
<i>E. Coli-coli</i> Bacteria	#/100 ml	126 ¹	235 ²
Chloride	mg/L	³	--
Sulfate	mg/L	³	--
Total Dissolved Solids	mg/L	³	--
Methylene Blue Active Substances	mg/L	0.5 ⁴	--
Aluminum, Total Recoverable	mg/L	1.0 ⁴	--
Cyanide, Total Recoverable	µg/L	4.3	8.5
Copper, Total Recoverable	µg/L	⁵	⁵
Mercury, Total Recoverable	µg/L	0.051	1.0 1
Selenium, Total Recoverable	µg/L	4.1	8.2

¹ *E. Coli-coli* density shall not exceed a geometric mean of 126/100 ml.

² *E. Coli-coli* density in a single sample shall not exceed 235/100 ml.

³ In accordance with applicable water quality objectives contained in ~~Tables 3-8 and 3-10~~ Chapter 3 of the Basin Plan.

⁴ Applicable only to discharges to receiving waters designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.

⁵ Action levels are hardness dependent. See Section VII of this Attachment for a listing of the applicable action levels.

Table G-2. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity between 1 ppt and 10 ppt)

Parameter	Units	Average Monthly	Daily Maximum
<i>E. Coli-coli</i> Bacteria	#/100 ml	126 ¹	235 ²
Total Coliform Bacteria	#/100 ml	1,000 ³	10,000 ⁴
Fecal Coliform Bacteria	#/100 ml	200 ³	400 ⁴
Enterococcus Bacteria	#/100 ml	35 ³	104 ⁴
Chloride	mg/L	⁵	--
Sulfate	mg/L	⁵	--
Total Dissolved Solids	mg/L	⁵	--
Methylene Blue Active Substances	mg/L	0.5 ⁶	--
Aluminum, Total Recoverable	mg/L	1.0 ⁶	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	⁷	⁷
Mercury, Total Recoverable	µg/L	0.051	1.0 1
Selenium, Total Recoverable	µg/L	4.1	8.2

¹ *E. Coli-coli* density shall not exceed a geometric mean of 126/100 ml.

² *E. Coli-coli* density in a single sample shall not exceed 235/100 ml.

³ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.

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- ⁴ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁵ In accordance with applicable water quality objectives contained in ~~Tables 3-8 and 3-10~~ Chapter 3 of the Basin Plan.
- ⁶ Applicable only to discharges to receiving waters designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.
- ⁷ The applicable action level is the most stringent between corresponding Table ~~HG-1~~ and Table ~~HG-3~~ action levels.

Table G-3. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or greater than 10 ppt 95% or more of the time)

Parameter	Units	Average Monthly	Daily Maximum
Total Coliform Bacteria	#/100 ml	1,000 ^{1,2}	10,000 ^{2,3}
Fecal Coliform Bacteria	#/100 ml	200 ¹	400 ³
Enterococcus Bacteria	#/100 ml	35 ¹	104 ³
Chloride	mg/L	4	--
Sulfate	mg/L	4	--
Total Dissolved Solids	mg/L	4	--
Methylene Blue Active Substances	mg/L	0.5 ⁵	--
Aluminum, Total Recoverable	mg/L	1.0 ⁵	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	2.9	5.8
Mercury, Total Recoverable	µg/L	0.051	<u>4.00.1</u>
Selenium, Total Recoverable	µg/L	58	117

- ¹ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ² In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ³ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁴ In accordance with applicable water quality objectives contained in ~~Tables 3-8 and 3-10~~ Chapter 3 of the Basin Plan.
- ⁵ Applicable only to discharges to receiving waters designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.

Table G-4. Action Levels for Discharges to Ocean Waters (Surf Zone)

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Total Coliform Bacteria	#/100 ml	70 ¹	230 ¹	--
Fecal Coliform Bacteria	#/100 ml	--	200 ²	400 ³
Enterococcus Bacteria	#/100 ml	--	35 ²	104 ³
Cyanide, Total Recoverable	µg/L	1	4	10
Copper, Total Recoverable	µg/L	3	12	30
Mercury, Total Recoverable	µg/L	0.04	0.16	0.4
Selenium, Total Recoverable	µg/L	15	60	150

- ¹ In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.

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- ² Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ³ Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

II. LOS ANGELES RIVER WATERSHED MANAGEMENT AREA

Table G-5. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or less than 1 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
<i>E. Coli-coli</i> Bacteria	#/100 ml	126 ²	235 ³
Chloride	mg/L	⁴	--
Nitrite Nitrogen, Total (as N)	mg/L	1.0 ⁵	--
Sulfate	mg/L	⁴	--
Total Dissolved Solids	mg/L	⁴	--
Turbidity	NTU	5 ⁵	--
Aluminum, Total Recoverable	mg/L	1.0 ⁵	--
Cyanide, Total Recoverable	µg/L	4.3	8.5
Copper, Total Recoverable	µg/L	⁶	⁶
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² *E. Coli-coli* density shall not exceed a geometric mean of 126/100 ml.
- ³ *E. Coli-coli* density in a single sample shall not exceed 235/100 ml.
- ⁴ In accordance with applicable water quality objectives contained in Tables 3-8 and 3-10 Chapter 3 of the Basin Plan.
- ⁵ Applicable only to discharges to receiving waters or receiving waters with underlying groundwater designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.
- ⁶ Action levels are hardness dependent. See Section VII of this Attachment for a listing of the applicable action levels.

Table G-6. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity between 1 ppt and 10 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
<i>E. Coli-coli</i> Bacteria	#/100 ml	126 ²	235 ³
Total Coliform Bacteria	#/100 ml	1,000 ⁴	10,000 ⁵
Fecal Coliform Bacteria	#/100 ml	200 ⁴	400 ⁵
Enterococcus Bacteria	#/100 ml	35 ⁴	104 ⁵
Chloride	mg/L	⁶	--
Nitrite Nitrogen, Total (as N)	mg/L	1.0 ⁷	--
Sulfate	mg/L	⁶	--
Total Dissolved Solids	mg/L	⁶	--
Turbidity	NTU	5 ⁷	--
Aluminum, Total Recoverable	mg/L	1.0 ⁷	--
Cyanide, Total Recoverable	µg/L	0.50	1.0

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Parameter	Units	Average Monthly	Daily Maximum
Copper, Total Recoverable	µg/L	8	8
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² *E. Coli* density shall not exceed a geometric mean of 126/100 ml.
- ³ *E. Coli* density in a single sample shall not exceed 235/100 ml.
- ⁴ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ⁵ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁶ In accordance with applicable water quality objectives contained in ~~Tables 3-8 and 3-10~~ Chapter 3 of the Basin Plan.
- ⁷ Applicable only to discharges to receiving waters or receiving waters with underlying groundwater designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.
- ⁸ The applicable action level is the most stringent between corresponding Table HG-5 and Table HG-7 action levels.

Table G-7. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or greater than 10 ppt 95% or more of the time)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
Total Coliform Bacteria	#/100 ml	1,000 ^{2, 3}	10,000 ^{3, 4}
Fecal Coliform Bacteria	#/100 ml	200 ²	400 ⁴
Enterococcus Bacteria	#/100 ml	35 ²	104 ⁴
Chloride	mg/L	5	--
Nitrite Nitrogen, Total (as N)	mg/L	1.0 ⁶	--
Sulfate	mg/L	5	--
Total Dissolved Solids	mg/L	5	--
Turbidity	NTU	5 ⁶	--
Aluminum, Total Recoverable	mg/L	1.0 ⁶	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	2.9	5.8
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	58	117

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ³ In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ⁴ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁵ In accordance with applicable water quality objectives contained in ~~Tables 3-8 and 3-10~~ Chapter 3 of the Basin Plan.
- ⁶ Applicable only to discharges to receiving waters or receiving waters with underlying groundwater designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.

R E V I S E D T E N T A T I V E

Table G-8. Action Levels for Discharges to Ocean Waters (Surf Zone)

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
pH	Standard units	6.0-9.0 ¹		
Total Coliform Bacteria	#/100 ml	70 ²	230 ²	--
Fecal Coliform Bacteria	#/100 ml	--	200 ³	400 ⁴
Enterococcus Bacteria	#/100 ml	--	35 ³	104 ⁴
Turbidity	NTU	75	100	225
Cyanide, Total Recoverable	µg/L	1	4	10
Copper, Total Recoverable	µg/L	3	12	30
Mercury, Total Recoverable	µg/L	0.04	0.16	0.4
Selenium, Total Recoverable	µg/L	15	60	150

¹ Within the range of 6.0 to 9.0 at all times.

² In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.

³ Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.

⁴ Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

III. DOMINGUEZ CHANNEL WATERSHED MANAGEMENT AREA

Table G-9. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or less than 1 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
<i>E. Coli-coli</i> Bacteria	#/100 ml	126 ²	235 ³
Cyanide, Total Recoverable	µg/L	4.3	8.5
Copper, Total Recoverable	µg/L	4	4
Lead, Total Recoverable	µg/L	4	4
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

¹ Within the range of 6.5 to 8.5 at all times.

² *E. Coli-coli* density shall not exceed a geometric mean of 126/100 ml.

³ *E. Coli-coli* density in a single sample shall not exceed 235/100 ml.

⁴ Action levels are hardness dependent. See Section VII of this Attachment for a listing of the applicable action levels.

Table G-10. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity between 1 ppt and 10 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	s.u	6.5-8.5 ¹	
<i>E. Coli-coli</i> Bacteria	#/100 ml	126 ²	235 ³

R E V I S E D T E N T A T I V E

Parameter	Units	Average Monthly	Daily Maximum
Total Coliform Bacteria	#/100 ml	1,000 ⁴	10,000 ⁵
Fecal Coliform Bacteria	#/100 ml	200 ⁴	400 ⁵
Enterococcus Bacteria	#/100 ml	35 ⁴	104 ⁵
Cyanide, Total Recoverable	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	⁶	⁶
Lead, Total Recoverable	µg/L	⁶	⁶
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

¹ Within the range of 6.5 to 8.5 at all times.

² *E. Coli* density shall not exceed a geometric mean of 126/100 ml.

³ *E. Coli* density in a single sample shall not exceed 235/100 ml.

⁴ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.

⁵ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

⁶ The applicable action level is the most stringent between corresponding Table H-G-9 and Table H-G-11 action levels.

Table G-11. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or greater than 10 ppt 95% or more of the time)

Parameter	Units	Average Monthly	Daily Maximum
pH	s.u	6.5-8.5 ¹	
Total Coliform Bacteria	#/100 ml	1,000 ^{2,3}	10,000 ^{3,4}
Fecal Coliform Bacteria	#/100 ml	200 ²	400 ⁴
Enterococcus Bacteria	#/100 ml	35 ²	104 ⁴
Cyanide, Total Recoverable	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	2.9	5.8
Lead, Total Recoverable	µg/L	7.0	14
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	58	117

¹ Within the range of 6.5 to 8.5 at all times.

² Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.

³ In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.

⁴ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

Table G-12. Action Levels for Discharges to Ocean Waters (Surf Zone)

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
pH	s.u	6.0-9.0 ¹		
Total Coliform Bacteria	#/100 ml	70 ²	230 ²	--
Fecal Coliform Bacteria	#/100 ml	--	200 ³	400 ⁴
Enterococcus Bacteria	#/100 ml	--	35 ³	104 ⁴
Cyanide, Total Recoverable	µg/L	1	4	10
Copper, Total	µg/L	3	12	30

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Recoverable				
Lead, Total Recoverable	µg/L	2	8	20
Mercury, Total Recoverable	µg/L	0.04	0.16	0.4
Selenium, Total Recoverable	µg/L	15	60	150

- ¹ Within the range of 6.0 to 9.0 at all times.
- ² In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ³ Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ⁴ Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

IV. BALLONA CREEK WATERSHED MANAGEMENT AREA

Table G-13. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or less than 1 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
<i>E. Coli-coli</i> Bacteria	#/100 ml	126 ²	235 ³
Cyanide, Total Recoverable	µg/L	4.3	8.5
Copper, Total Recoverable	µg/L	4	4
Lead, Total Recoverable	µg/L	4	4
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² *E. Coli-coli* density shall not exceed a geometric mean of 126/100 ml.
- ³ *E. Coli-coli* density in a single sample shall not exceed 235/100 ml.
- ⁴ Action levels are hardness dependent. See Section VII of this Attachment for a listing of the applicable action levels.

Table G-14. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity between 1 ppt and 10 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
<i>E. Coli-coli</i> Bacteria	#/100 ml	126 ²	235 ³
Total Coliform Bacteria	#/100 ml	1,000 ⁴	10,000 ⁵
Fecal Coliform Bacteria	#/100 ml	200 ⁴	400 ⁵
Enterococcus Bacteria	#/100 ml	35 ⁴	104 ⁵
Cyanide	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	6	6
Lead, Total Recoverable	µg/L	6	6
Mercury, Total Recoverable	µg/L	0.051	1.00.1
Selenium, Total Recoverable	µg/L	4.1	8.2

R E V I S E D T E N T A T I V E

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² *E. Coli* density shall not exceed a geometric mean of 126/100 ml.
- ³ *E. Coli* density in a single sample shall not exceed 235/100 ml.
- ⁴ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ⁵ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁶ The applicable action level is the most stringent between corresponding Table HG-13 and Table HG-15 action levels.

Table G-15. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or greater than 10 ppt 95% or more of the time)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
Total Coliform Bacteria	#/100 ml	1,000 ^{2, 3}	10,000 ^{3, 4}
Fecal Coliform Bacteria	#/100 ml	200 ²	400 ⁴
Enterococcus Bacteria	#/100 ml	35 ²	104 ⁴
Cyanide, Total Recoverable	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	2.9	5.8
Lead, Total Recoverable	µg/L	7.0	14
Mercury, Total Recoverable	µg/L	0.051	1.00.1
Selenium, Total Recoverable	µg/L	58	117

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ³ In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ⁴ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

Table G-16. Action Levels for Discharges to Ocean Waters (Surf Zone)

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
pH	Standard units	6.0-9.0 ¹		
Total Coliform Bacteria	#/100 ml	70 ²	230 ²	--
Fecal Coliform Bacteria	#/100 ml	--	200 ³	400 ⁴
Enterococcus Bacteria	#/100 ml	--	35 ³	104 ⁴
Cyanide, Total Recoverable	µg/L	1	4	10
Copper, Total Recoverable	µg/L	3	12	30
Lead, Total Recoverable	µg/L	2	8	20
Mercury, Total Recoverable	µg/L	0.04	0.16	0.4
Selenium, Total Recoverable	µg/L	15	60	150

- ¹ Within the range of 6.0 to 9.0 at all times.

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- ² In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ³ Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ⁴ Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

V. MALIBU CREEK WATERSHED MANAGEMENT AREA NON-STORM WATER ACTION LEVELS

Table G-17. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or less than 1 ppt)

Parameter	Units	Average Monthly	Daily Maximum
<i>E. Coli-coli</i> Bacteria	#/100 ml	126 ¹	235 ²
Sulfate	mg/L	³	--
Total Dissolved Solids	mg/L	³	--
Cyanide, Total Recoverable	µg/L	4.3	8.5
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

¹ *E. Coli-coli* density shall not exceed a geometric mean of 126/100 ml.
² *E. Coli-coli* density in a single sample shall not exceed 235/100 ml.
³ In accordance with applicable water quality objectives contained in ~~Tables 3-8 and 3-10~~ Chapter 3 of the Basin Plan.

Table G-18. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity between 1 ppt and 10 ppt)

Parameter	Units	Average Monthly	Daily Maximum
<i>E. Coli-coli</i> Bacteria	#/100 ml	126 ¹	235 ²
Total Coliform Bacteria	#/100 ml	1,000 ³	10,000 ⁴
Fecal Coliform Bacteria	#/100 ml	200 ³	400 ⁴
Enterococcus Bacteria	#/100 ml	35 ³	104 ⁴
Sulfate	mg/L	⁵	--
Total Dissolved Solids	mg/L	⁵	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

¹ *E. Coli-coli* density shall not exceed a geometric mean of 126/100 ml.
² *E. Coli-coli* density in a single sample shall not exceed 235/100 ml.
³ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
⁴ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
⁵ In accordance with applicable water quality objectives contained in ~~Tables 3-8 and 3-10~~ Chapter 3 of the Basin Plan.

Table G-19. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or greater than 10 ppt 95% or more of the time)

Parameter	Units	Average Monthly	Daily Maximum
Total Coliform Bacteria	#/100 ml	1,000 ^{1,2}	10,000 ^{2,3}

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Parameter	Units	Average Monthly	Daily Maximum
Fecal Coliform Bacteria	#/100 ml	200 ¹	400 ³
Enterococcus Bacteria	#/100 ml	35 ¹	104 ³
Sulfate	mg/L	4	--
Total Dissolved Solids	mg/L	4	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	58	117

- ¹ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ² In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ³ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁴ In accordance with applicable water quality objectives contained in Tables 3-8 and 3-10 Chapter 3 of the Basin Plan.

Table G-20. Action Levels for Discharges to Ocean Waters (Surf Zone)

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Total Coliform Bacteria	#/100 ml	70 ¹	230 ¹	--
Fecal Coliform Bacteria	#/100 ml	--	200 ²	400 ³
Enterococcus Bacteria	#/100 ml	--	35 ²	104 ³
Cyanide, Total Recoverable	µg/L	1	4	10
Mercury, Total Recoverable	µg/L	0.04	0.16	0.4
Selenium, Total Recoverable	µg/L	15	60	150

- ¹ In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ² Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ³ Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

VI. SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA

Table G-21. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or less than 1 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.0-9.0 ¹	
<i>E. Coli-coli</i> Bacteria	#/100 ml	126 ²	235 ³
Chloride	mg/L	4	--
Nitrate Nitrogen, Total (as N)	mg/L	4	--
Sulfate	mg/L	4	--
Total Dissolved Solids	mg/L	4	--

R E V I S E D T E N T A T I V E

Parameter	Units	Average Monthly	Daily Maximum
Aluminum, Total Recoverable	mg/L	1.0 ⁵	--
Cyanide, Total Recoverable	µg/L	4.3	8.5
Cadmium, Total Recoverable	µg/L	6	6
Copper, Total Recoverable	µg/L	6	6
Lead, Total Recoverable	µg/L	6	6
Mercury, Total Recoverable	µg/L	0.051	0.10
Nickel, Total Recoverable	µg/L	6	6
Selenium, Total Recoverable	µg/L	4.1	8.2
Silver, Total Recoverable	µg/L	6	6
Zinc, Total Recoverable	µg/L	6	6

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² *E. Coli* density shall not exceed a geometric mean of 126/100 ml.
- ³ *E. Coli* density in a single sample shall not exceed 235/100 ml.
- ⁴ In accordance with applicable water quality objectives contained in Tables 3-8 and 3-10 Chapter 3 of the Basin Plan.
- ⁵ Applicable only to discharges to receiving waters or receiving waters with underlying groundwater designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.
- ⁶ Action levels are hardness dependent. See Section VII of this Attachment for a listing of the applicable action levels.

Table G-22. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity between 1 ppt and 10 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.0-9.0 ¹	
<i>E. Coli</i> Bacteria	#/100 ml	126 ²	235 ³
Total Coliform Bacteria	#/100 ml	1,000 ⁴	10,000 ⁵
Fecal Coliform Bacteria	#/100 ml	200 ⁴	400 ⁵
Enterococcus Bacteria	#/100 ml	35 ⁴	104 ⁵
Chloride	mg/L	6	--
Nitrate Nitrogen, Total (as N)	mg/L	6	--
Sulfate	mg/L	6	--
Total Dissolved Solids	mg/L	6	--
Aluminum, Total Recoverable	mg/L	1.0 ⁷	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Cadmium, Total Recoverable	µg/L	8	8
Copper, Total Recoverable	µg/L	8	8
Lead, Total Recoverable	µg/L	8	8
Mercury, Total Recoverable	µg/L	0.051	0.10
Nickel, Total Recoverable	µg/L	8	8
Selenium, Total Recoverable	µg/L	4.1	8.2
Silver, Total Recoverable	µg/L	8	8
Zinc, Total Recoverable	µg/L	8	8

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² *E. Coli* density shall not exceed a geometric mean of 126/100 ml.
- ³ *E. Coli* density in a single sample shall not exceed 235/100 ml.
- ⁴ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.

REVISED TENTATIVE

- ⁵ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁶ In accordance with applicable water quality objectives contained in ~~Tables 3-8 and 3-10~~ Chapter 3 of the Basin Plan.
- ⁷ Applicable only to discharges to receiving waters designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.
- ⁸ The applicable action level is the most stringent between corresponding Table ~~HG-21~~ and Table ~~HG-23~~ action levels.

Table G-23. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or greater than 10 ppt 95% or more of the time)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.0-9.0 ¹	
Total Coliform Bacteria	#/100 ml	1,000 ^{2,3}	10,000 ^{2,4}
Fecal Coliform Bacteria	#/100 ml	200 ²	400 ⁴
Enterococcus Bacteria	#/100 ml	35 ²	104 ⁴
Chloride	mg/L	5	--
Nitrate Nitrogen, Total (as N)	mg/L	5	--
Sulfate	mg/L	5	--
Total Dissolved Solids	mg/L	5	--
Aluminum, Total Recoverable	mg/L	1.0 ⁶	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Cadmium, Total Recoverable	µg/L	7.7	15
Copper, Total Recoverable	µg/L	2.9	5.8
Lead, Total Recoverable	µg/L	7.0	14
Mercury, Total Recoverable	µg/L	0.051	0.10
Nickel, Total Recoverable	µg/L	6.8	14
Silver, Total Recoverable	µg/L	1.1	2.2
Selenium, Total Recoverable	µg/L	58	117
Zinc, Total Recoverable	µg/L	47	95

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ³ In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ⁴ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁵ In accordance with applicable water quality objectives contained in ~~Tables 3-8 and 3-10~~ Chapter 3 of the Basin Plan.
- ⁶ Applicable only to discharges to receiving waters designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.

Table G-24. Action Levels for Discharges to Ocean Waters (Surf Zone)

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
pH	Standard units	6.0-9.0 ¹		
Total Coliform Bacteria	#/100 ml	70 ²	230 ²	--
Fecal Coliform Bacteria	#/100 ml	--	200 ³	400 ⁴
Enterococcus	#/100 ml	--	35 ³	104 ⁴

R E V I S E D T E N T A T I V E

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Cyanide, Total Recoverable	µg/L	1	4	10
Cadmium, Total Recoverable	µg/L	1	4	10
Copper, Total Recoverable	µg/L	3	12	30
Lead, Total Recoverable	µg/L	2	8	20
Mercury, Total Recoverable	µg/L	0.04	0.16	0.4
Nickel, Total Recoverable	µg/L	5	20	50
Silver, Total Recoverable	µg/L	0.7	2.8	7.0
Selenium, Total Recoverable	µg/L	15	60	150
Zinc, Total Recoverable	µg/L	20	80	200

- ¹ Within the range of 6.0 to 9.0 at all times.
- ² In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ³ Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ⁴ Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

VII. HARDNESS-BASED ACTION LEVELS FOR METALS

Cadmium, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
5.0	0.1	0.2	125.0	2.4	4.8	245.0	4.1	8.2
10.0	0.2	0.3	130.0	2.5	5.0	250.0	4.1	8.3
15.0	0.3	0.5	135.0	2.5	5.1	255.0	4.2	8.4
20.0	0.4	0.7	140.0	2.6	5.3	260.0	4.3	8.5
25.0	0.5	0.9	145.0	2.7	5.4	265.0	4.3	8.7
30.0	0.6	1.2	150.0	2.8	5.5	270.0	4.4	8.8
35.0	0.7	1.4	155.0	2.8	5.7	275.0	4.5	8.9
40.0	0.8	1.6	160.0	2.9	5.8	280.0	4.5	9.1
45.0	0.9	1.8	165.0	3.0	6.0	285.0	4.6	9.2
50.0	1.0	2.1	170.0	3.1	6.1	290.0	4.6	9.3
55.0	1.1	2.3	175.0	3.1	6.3	295.0	4.7	9.4
60.0	1.3	2.5	180.0	3.2	6.4	300.0	4.8	9.6
65.0	1.4	2.8	185.0	3.3	6.5	310.0	4.9	9.8
70.0	1.5	3.0	190.0	3.3	6.7	320.0	5.0	10.1
75.0	1.6	3.2	195.0	3.4	6.8	330.0	5.1	10.3
80.0	1.7	3.4	200.0	3.5	7.0	340.0	5.3	10.5
85.0	1.8	3.6	205.0	3.5	7.1	350.0	5.4	10.8

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Cadmium, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
90.0	1.9	3.7	210.0	3.6	7.2	360.0	5.5	11.0
95.0	1.9	3.9	215.0	3.7	7.4	370.0	5.6	11.3
100.0	2.0	4.0	220.0	3.7	7.5	380.0	5.7	11.5
105.0	2.1	4.2	225.0	3.8	7.6	390.0	5.9	11.7
110.0	2.2	4.3	230.0	3.9	7.8	400.0	6.0	12.0
115.0	2.2	4.5	235.0	3.9	7.9	>400	6.0	12.0
120.0	2.3	4.7	240.0	4.0	8.0			

Copper, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
5.0	0.4	0.8	125.0	8.6	17.2	245.0	16.2	32.5
10.0	0.8	1.6	130.0	8.9	17.9	250.0	16.5	33.1
15.0	1.2	2.3	135.0	9.2	18.5	255.0	16.8	33.8
20.0	1.5	3.1	140.0	9.6	19.2	260.0	17.1	34.4
25.0	1.9	3.8	145.0	9.9	19.8	265.0	17.4	35.0
30.0	2.2	4.5	150.0	10.2	20.5	270.0	17.8	35.6
35.0	2.6	5.2	155.0	10.5	21.1	275.0	18.1	36.2
40.0	2.9	5.9	160.0	10.8	21.8	280.0	18.4	36.9
45.0	3.3	6.6	165.0	11.2	22.4	285.0	18.6	37.4
50.0	3.6	7.3	170.0	11.5	23.0	290.0	18.9	38.0
55.0	4.0	8.0	175.0	11.8	23.7	295.0	19.2	38.5
60.0	4.3	8.6	180.0	12.1	24.3	300.0	19.5	39.1
65.0	4.6	9.3	185.0	12.4	25.0	310.0	20.0	40.2
70.0	5.0	10.0	190.0	12.8	25.6	320.0	20.6	41.3
75.0	5.3	10.7	195.0	13.1	26.2	330.0	21.1	42.4
80.0	5.6	11.3	200.0	13.4	26.9	340.0	21.7	43.5
85.0	6.0	12.0	205.0	13.7	27.5	350.0	22.2	44.6
90.0	6.3	12.7	210.0	14.0	28.1	360.0	22.8	45.7
95.0	6.6	13.3	215.0	14.3	28.7	370.0	23.3	46.8
100.0	7.0	14.0	220.0	14.6	29.4	380.0	23.8	47.8
105.0	7.3	14.6	225.0	15.0	30.0	390.0	24.4	48.9
110.0	7.6	15.3	230.0	15.3	30.6	400.0	24.9	50.0
115.0	7.9	15.9	235.0	15.6	31.3	>400	24.9	50.0
120.0	8.3	16.6	240.0	15.9	31.9			

Lead, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
5.0	0.1	0.1	125.0	3.5	6.9	245.0	8.1	16.3
10.0	0.1	0.3	130.0	3.6	7.3	250.0	8.3	16.7

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Lead, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
15.0	0.2	0.5	135.0	3.8	7.6	255.0	8.6	17.2
20.0	0.3	0.7	140.0	4.0	8.0	260.0	8.8	17.6
25.0	0.4	0.9	145.0	4.2	8.4	265.0	9.0	18.0
30.0	0.6	1.1	150.0	4.4	8.7	270.0	9.2	18.5
35.0	0.7	1.4	155.0	4.5	9.1	275.0	9.4	18.9
40.0	0.8	1.6	160.0	4.7	9.5	280.0	9.6	19.3
45.0	0.9	1.9	165.0	4.9	9.9	285.0	9.9	19.8
50.0	1.1	2.2	170.0	5.1	10.2	290.0	10.1	20.2
55.0	1.2	2.4	175.0	5.3	10.6	295.0	10.3	20.7
60.0	1.4	2.7	180.0	5.5	11.0	300.0	10.5	21.1
65.0	1.5	3.0	185.0	5.7	11.4	310.0	11.0	22.0
70.0	1.7	3.3	190.0	5.9	11.8	320.0	11.4	22.9
75.0	1.8	3.6	195.0	6.1	12.2	330.0	11.9	23.8
80.0	2.0	3.9	200.0	6.3	12.6	340.0	12.3	24.8
85.0	2.1	4.2	205.0	6.5	13.0	350.0	12.8	25.7
90.0	2.3	4.6	210.0	6.7	13.4	360.0	13.3	26.6
95.0	2.4	4.9	215.0	6.9	13.8	370.0	13.7	27.6
100.0	2.6	5.2	220.0	7.1	14.2	380.0	14.2	28.5
105.0	2.8	5.5	225.0	7.3	14.6	390.0	14.7	29.5
110.0	2.9	5.9	230.0	7.5	15.1	400.0	15.2	30.5
115.0	3.1	6.2	235.0	7.7	15.5	>400	15.2	30.5
120.0	3.3	6.6	240.0	7.9	15.9			

Nickel, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
5.0	3.4	6.8	125.0	51.5	103.3	245.0	90.9	182.5
10.0	6.1	12.2	130.0	53.2	106.7	250.0	92.5	185.6
15.0	8.6	17.2	135.0	54.9	110.2	255.0	94.1	188.7
20.0	10.9	21.9	140.0	56.6	113.6	260.0	95.6	191.9
25.0	13.2	26.5	145.0	58.3	117.1	265.0	97.2	195.0
30.0	15.4	30.9	150.0	60.0	120.5	270.0	98.7	198.1
35.0	17.5	35.2	155.0	61.7	123.9	275.0	100.3	201.2
40.0	19.6	39.4	160.0	63.4	127.2	280.0	101.8	204.3
45.0	21.7	43.5	165.0	65.1	130.6	285.0	103.3	207.4
50.0	23.7	47.6	170.0	66.8	133.9	290.0	104.9	210.4
55.0	25.7	51.6	175.0	68.4	137.3	295.0	106.4	213.5
60.0	27.7	55.5	180.0	70.1	140.6	300.0	107.9	216.6
65.0	29.6	59.4	185.0	71.7	143.9	310.0	111.0	222.7
70.0	31.5	63.2	190.0	73.3	147.1	320.0	114.0	228.7
75.0	33.4	67.0	195.0	75.0	150.4	330.0	117.0	234.7
80.0	35.3	70.8	200.0	76.6	153.7	340.0	120.0	240.7

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Nickel, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
85.0	37.1	74.5	205.0	78.2	156.9	350.0	123.0	246.7
90.0	39.0	78.2	210.0	79.8	160.2	360.0	125.9	252.7
95.0	40.8	81.9	215.0	81.4	163.4	370.0	128.9	258.6
100.0	42.6	85.5	220.0	83.0	166.6	380.0	131.8	264.5
105.0	44.4	89.1	225.0	84.6	169.8	390.0	134.8	270.4
110.0	46.2	92.7	230.0	86.2	173.0	400.0	137.7	276.2
115.0	48.0	96.2	235.0	87.8	176.1	>400	137.7	276.2
120.0	49.7	99.8	240.0	89.4	179.3			

Zinc, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
5.0	4.7	9.4	125.0	72.0	144.5	245.0	127.4	255.6
10.0	8.5	17.0	130.0	74.5	149.4	250.0	129.6	260.0
15.0	11.9	24.0	135.0	76.9	154.2	255.0	131.8	264.4
20.0	15.2	30.6	140.0	79.3	159.1	260.0	134.0	268.8
25.0	18.4	37.0	145.0	81.7	163.9	265.0	136.1	273.1
30.0	21.5	43.1	150.0	84.1	168.6	270.0	138.3	277.5
35.0	24.5	49.1	155.0	86.4	173.4	275.0	140.5	281.9
40.0	27.4	55.0	160.0	88.8	178.1	280.0	142.6	286.2
45.0	30.3	60.8	165.0	91.1	182.8	285.0	144.8	290.5
50.0	33.1	66.5	170.0	93.5	187.5	290.0	146.9	294.8
55.0	35.9	72.1	175.0	95.8	192.2	295.0	149.1	299.1
60.0	38.7	77.6	180.0	98.1	196.8	300.0	151.2	303.4
65.0	41.4	83.0	185.0	100.4	201.4	310.0	155.5	312.0
70.0	44.1	88.4	190.0	102.7	206.0	320.0	159.7	320.5
75.0	46.7	93.7	195.0	105.0	210.6	330.0	163.9	328.9
80.0	49.3	99.0	200.0	107.3	215.2	340.0	168.1	337.4
85.0	51.9	104.2	205.0	109.5	219.8	350.0	172.3	345.8
90.0	54.5	109.4	210.0	111.8	224.3	360.0	176.5	354.1
95.0	57.1	114.5	215.0	114.0	228.8	370.0	180.6	362.4
100.0	59.6	119.6	220.0	116.3	233.3	380.0	184.8	370.7
105.0	62.1	124.7	225.0	118.5	237.8	390.0	188.9	379.0
110.0	64.6	129.7	230.0	120.7	242.3	400.0	193.0	387.2
115.0	67.1	134.7	235.0	123.0	246.7	>400	193.0	387.2
120.0	69.6	139.6	240.0	125.2	251.2			

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VIII. MUNICIPAL ACTION LEVELS

Conventional Pollutants

Pollutants	pH	TSS mg/L	COD mg/L	Kjedahl Nitrogen (TKN) mg/L	Nitrate & Nitrite-total mg/L	P- total mg/L
Municipal Action Level	7.70 6.0-9.0	264.1	247.5	4.59	1.85	0.80

Metals

Pollutants	Cd- total µg/L	Cr-total µg/L	Cu- total µg/L	Pb- total µg/L	Ni- total µg/L	Zn- total µg/L	Hg- total µg/L
Municipal Action Level	2.52	20.20	71.12	102.00	27.43	641.3	0.32

This Order establishes Municipal Action Levels (MALs) to identify subwatersheds requiring additional Best Management Practices (BMPs) to reduce pollutant loads and prioritize implementation of additional BMPs. MALs for selected pollutants are based on nationwide Phase I MS4 monitoring data for pollutants in storm water (<http://unix.eng.ua.edu/~rpitt/Research/Research.shtml>, last visited on May 9, 2012). The MALs were obtained by computing the upper 25th percentile for selected pollutants for Rain Zone 6 using the statistical program Minitab. Non-detects were removed from the data set and all data from the database were used.

Under this Order, the Municipal Action Levels (MALs) shall be utilized by Permittees to identify subwatersheds discharging pollutants at levels in excess of the MALs. Within those subwatersheds where pollutant levels in the discharge are in excess of the MALs, Permittees shall implement controls and measures necessary to reduce the discharge of pollutants.

In order to determine if MS4 discharges are in excess of the MALs, Permittees shall conduct outfall monitoring as required in the Monitoring and Reporting Program (MRP) (Attachment E). A MAL Assessment Report shall be submitted to the Regional Water Board Executive Officer as part of the Annual Report. The MAL Assessment Report shall present the monitoring data in comparison to the applicable MALs, and identify those subwatersheds with a running average of twenty percent or greater of exceedances of the MALs listed in this attachment in discharges of storm water from the MS4.

Beginning in Year 3 after the effective date of this Order, each Permittee shall submit a MAL Action Plan with the Annual Report (first MAL Action Plan due with December 15, 2013 Annual Report) to the Regional Water Board Executive Officer, for those subwatersheds with a

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running average of twenty percent or greater of exceedances of the MALs in any discharge of storm water from the MS4. The plan shall include an assessment of the sources responsible for the MAL exceedances, the existing storm water programs and BMPs that address those sources, an assessment of potential program enhancements, alternative BMPs and actions the Permittee shall implement to reduce discharges to a level that is equivalent to or below the MALs, and an implementation schedule for such actions for Executive Officer approval. The MAL Action Plan shall provide the technical rationale to demonstrate the proposed measures and controls will attain the MALs. If the MAL Action Plan is not approved within 90 days of the due date, the Executive Officer may establish an appropriate plan with at least 90 day notification and consultation to the Permittees.

Within 90 days of the plan approval by the Regional Water Board Executive Officer, the Permittee shall initiate the BMPs and actions proposed in the MAL Action Plan, together with any other practicable BMPs or actions that the Executive Officer determines to be necessary to meet the MALs. The Permittee shall complete the proposed actions in accordance with the approved implementation schedule.

Upon completion of the actions specified in the approved MAL Action Plan, the Permittee shall re-monitor the subject subwatershed in accordance with the MRP, and submit a Post-Project MAL Assessment Report to the Regional Water Board Executive Officer.

Implementation of an approved Watershed Management Program per Part VI.C of the Order fulfills all requirements related to the development and implementation of the MAL Action Plan.

As additional data become available through the MRP or from the Regional Subset of the National Dataset, MALs may be revised annually by the Regional Water Board Executive Officer in accordance with an equivalent statistical method as that used to establish the MALs in this attachment with at least 90 day notification and consultation to the Permittees.

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ATTACHMENT H. BIORETENTION / BIOFILTRATION DESIGN CRITERIA

Note: A significant portion of the information in this appendix has been copied verbatim from the *Ventura County Technical Guidance Manual*, Updated 2011, and modified to reflect recent changes to the bioretention/biofiltration soil media specifications as adopted by the California Regional Water Quality Control Board, San Francisco Region, on November 28, 2011, Order No. R2-2011-083, Attachment L. Permittees can submit alternate Bioretention/Biofiltration Design Criteria subject to Executive Officer approval.

1. Geometry

- a. Bioretention/biofiltration areas shall be sized to capture and treat the design with an 18-inch maximum ponding depth. *The intention is that the ponding depth be limited to a depth that will allow for a healthy vegetation layer.*
- b. Minimum planting soil depth should be 2 feet, although 3 feet is preferred. *The intention is that the minimum planting soil depth should provide a beneficial root zone for the chosen plant palette and adequate water storage for the SWQDv.*
- c. A gravel storage layer below the bioretention/biofiltration soil media is required as necessary to provide adequate temporary storage to retain the SWQDv and to promote infiltration.

2. Drainage

- a. Bioretention and biofiltration BMPs should be designed to drain below the planting soil in less than 48 hours and completely drain in less than 96 hours. *The intention is that soils must be allowed to dry out periodically in order to restore hydraulic capacity needed to receive flows from subsequent storms, maintain infiltration rates, maintain adequate soil oxygen levels for healthy soil biota and vegetation, and to provide proper soil conditions for biodegradation and retention of pollutants.*
- b. *Biofiltration BMPs are designed and constructed with an underdrain. The underdrain is preferably placed near the top of the gravel storage area to promote incidental infiltration and enhanced nitrogen removal.* However, if *in-situ*, underlying soils do not provide sufficient drainage, the underdrain may need to be placed lower in the gravel storage area (within 6 inches of the bottom) to prevent the unit from holding stagnant water for extended periods of time. At many sites, clay soils will drain sufficiently fast, particularly if they are not compacted. Observing soil moisture and surface conditions in the days following a wet period may provide sufficient information for making this decision and may be more directly applicable than *in situ* or laboratory testing of soil characteristics.¹

3. Overflow

An overflow device is required at the 18-inch ponding depth. The following, or equivalent, should be provided:

- a. A vertical PVC pipe (SDR 35) to act as an overflow riser.

¹¹ Dan Cloak, Dan Cloak Environmental Consulting to Tom Dalziel, Contra Costa County, February 22, 2011.
Attachment H – Bioretention/Biofiltration Design Criteria

- b. The overflow riser(s) should be 6 inches or greater in diameter, so it can be cleaned without damage to the pipe.

The inlet to the riser should be at the ponding depth (18 inches for fenced bioretention areas and 6 inches for areas that are not fenced), and be capped with a spider cap to exclude floating mulch and debris. Spider caps should be screwed in or glued, i.e., not removable.

4. Integrated Water Quality/ Flow Reduction/Resources Management Criteria

- a. When calculating the capacity of an infiltration system, each Permittee shall account for the 24-hour infiltration assuming that the soil is saturated. Infiltration BMPs shall be limited to project sites where the in-situ soil or the amended on-site soils have a demonstrated infiltration rate under saturated conditions of no less than 0.45-3 inch per hour.
- b. Bioretention BMPs shall be designed to accommodate the minimum design flow at a surface loading rate of 5 inches per hour and no greater than 12 inches per hour, and shall have a total volume, including pore spaces and pre-filter detention volume of no less than the SWQDv.
- c. If rainwater harvested for use in irrigation is to be credited toward the total volume of storm water runoff retained on-site, each Permittee shall require the project proponent to conduct a conservative (assuming reasonable worst-case scenarios) assessment of water demand during the wet-weather season. This volume will be referred to as the "reliable" estimate of irrigation demand. The portion of water to be credited as retained on-site for use in irrigation shall not exceed the reliable estimate of irrigation demand.
- d. Harvested rainwater must be stored in a manner that precludes the breeding of mosquitoes or other vectors or with a draw down not to exceed 96 hours.
- e. When evaluating the potential for on-site retention, each Permittee shall consider the maximum potential for evapotranspiration from green roofs and rainfall harvest and use.
- f. Project requirements shall address at a minimum the potential use of harvested rainwater for non-potable uses including toilet flushing, laundry, and cooling water makeup water. If the municipal, building or county health code(s) does not allow such use of harvested rainwater, each Permittee shall develop a model ordinance and submit it to the city council or County Supervisors for consideration within 24 months after the Order effective date. The model ordinances shall be based on the International Association of Plumbing and Mechanical Officials' (IAPMO's) Green Plumbing and Mechanical Code Supplement to the 2012 National Standard Plumbing Code, or similar guidance to ensure the safe and effective use of harvested rainwater, separate from the existing provisions, if any, for reclaimed wastewater.

5. Hydraulic Restriction Layers

Infiltration pathways may need to be restricted due to the close proximity of roads, foundations, or other infrastructure. A geomembrane liner, or other equivalent water proofing, may be placed along the vertical walls to reduce lateral flows. This liner should have a minimum thickness of 30 mils. Generally, Waterproof-waterproof barriers may should not be placed on the bottom of the biofiltration unit, as this would prevent incidental infiltration which is critical-important to meeting the required pollutant load reduction.

6. Planting/Storage Media Specifications

- a. The planting media placed in the cell should achieve a long-term, in-place infiltration rate of at least 5 inches per hour. Higher infiltration rates of up to 12 inches per hour are permissible. Bioretention/biofiltration soil shall retain sufficient moisture to support vigorous plant growth.
- b. Planting media should consist of 60 to 80% fine sand and 20 to 40% compost.
- c. Sand should be free of wood, waste, coating such as clay, stone dust, carbonate, etc. or any other deleterious material. All aggregate passing the No. 200 sieve size should be non-plastic. Sand for bioretention should be analyzed by an accredited lab using #200, #100, #40, #30, #16, #8, #4, and 3/8 sieves (ASTM D 422 or as approved by the local permitting authority) and meet the following gradation (Note: all sands complying with ASTM C33 for fine aggregate comply with the gradation requirements provided in Table H-1):

Table H-1. Sand Texture Specifications

Sieve Size ASTM D422	Percent Passing by Weight	
	Minimum	Maximum
3 /8 inch	100	100
No. 4	90	100
No. 8	70	100
No. 16	40	95
No. 30	15	70
No. 40	5	55
No. 110	0	15
No. 200	0	5

Note: The gradation of the sand component of the media is believed to be a major factor in the hydraulic conductivity of the media mix. If the desired hydraulic conductivity of the media cannot be achieved within the specified proportions of sand and compost (#2), then it may be necessary to utilize sand at the coarser end of the range specified in above (“minimum” column).

- d. Compost should be a well decomposed, stable, weed free organic matter source derived from waste materials including yard debris, wood wastes, or other organic materials not including manure or biosolids meeting standards developed by the US Composting Council (USCC). The product shall be certified through the USCC Seal of Testing Assurance (STA) Program (a compost testing and information disclosure program). Compost quality should be verified via a lab analysis to be:
 - Feedstock materials shall be specified and include one or more of the following: landscape/yard trimmings, grass clippings, food scraps, and agricultural crop residues.
 - Organic matter: 35-75% dry weight basis.
 - Carbon and Nitrogen Ratio: 15:1 < C:N < 25:1

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- **Maturity/Stability:** shall have dark brown color and a soil-like odor. Compost exhibiting a sour or putrid smell, containing recognizable grass or leaves, or is hot (120 F) upon delivery or rewetting is not acceptable.
- **Toxicity:** any one of the following measures is sufficient to indicate non-toxicity:
 - NH₄:NH₃ < 3
 - Ammonium < 500 ppm, dry weight basis
 - Seed Germination > 80% of control
 - Plant trials > 80% of control
 - Solvita® > 5 index value
- **Nutrient content:**
 - Total Nitrogen content 0.9% or above preferred
 - Total Boron should be <80 ppm, soluble boron < 2.5 ppm
- **Salinity:** < 6.0 mmhos/cm
- **pH** between 6.5 and 8 (may vary with plant palette)
- **Compost for bioretention** should be analyzed by an accredited lab using #200, ¼ inch, ½ inch, and 1 inch sieves (ASTM D 422) and meet the gradation described in Table H-2:

Table H-2. Compost Texture Specifications

Sieve Size ASTM D422	Percent Passing by Weight	
	Minimum	Maximum
1 inch	99	100
½ inch	90	100
¼ inch	40	90
#200	2	10

Tests should be sufficiently recent to represent the actual material that is anticipated to be delivered to the site. If processes or sources used by the supplier have changed significantly since the most recent testing, new tests should be requested.

Note: the gradation of compost used in bioretention/biofiltration media is believed to play an important role in the saturated hydraulic conductivity of the media. To achieve a higher saturated hydraulic conductivity, it may be necessary to utilize compost at the coarser end of this range (“minimum” column). The percent passing the #200 sieve (fines) is believed to be the most important factor in hydraulic conductivity.

In addition, a coarser compost mix provides more heterogeneity of the bioretention media, which is believed to be advantageous for more rapid development of soil structure needed to support health biological processes. This may be an advantage for plant establishment with lower nutrient and water input.

- e. **Bioretention/Biofiltration soils** not meeting the above criteria shall be evaluated on a case by case basis. Alternative bioretention soil shall meet the following specification: “Soils for bioretention facilities shall be sufficiently permeable to infiltrate runoff at a minimum rate of 5 inches per hour during the life of the facility, and provide sufficient retention of moisture and nutrients to support healthy vegetation.” The following steps shall be followed by the Permittees to verify that alternative soil mixes meet the specification:

- Submittals – The applicant must submit to the Permittee for approval:
 - A sample of mixed bioretention/biofiltration soil.
 - Certification from the soil supplier or an accredited laboratory that the bioretention/biofiltration soil meets the requirements of this specification.
 - Certification from an accredited geotechnical testing laboratory that the bioretention/biofiltration soil has an infiltration rate of between 5 and 12 inches per hour.
 - Organic content test results of mixed bioretention/biofiltration soil. Organic content test shall be performed in accordance with by Testing Methods for the Examination of Compost and Composting (TMECC) 05.07A, “Loss-On-Ignition Organic Matter Method”.
 - Organic Grain size analysis results of mixed bioretention/biofiltration soil performed in accordance with ASTM D 422, Standard Test Method for Particle Size Analysis of Soils.
 - A description of the equipment and methods used to mix the sand and compost to produce the bioretention/biofiltration soil.
- The name of the testing laboratory(s) and the following information:
 - Contact person(s)
 - Address(s)
 - Phone contact(s)
 - email address(s)
 - Qualifications of laboratory(s), and personnel including date of current
 - Certification by STA, ASTM, or approved equal.
- Bioretention/biofiltration soils shall be analyzed by an accredited lab using #200, and 1/2” inch sieves (ASTM D 422 or as approved by municipality), and meet the gradation described in Table H-3).

Table H-3. Alternative Bioretention/Biofiltration Soil Texture Specifications

Sieve Size ASTM D422	Percent Passing by Weight	
	Minimum	Maximum
1/2 inch	97	100
200	2	5

- Bioretention/biofiltration soils shall be analyzed by an accredited geotechnical lab for the following tests:
 - Moisture – density relationships (compaction tests) shall be conducted on bioretention soil. Bioretention/biofiltration soil for the permeability test shall be compacted to 85 to 90 percent of the maximum dry density (ASTM D1557).
 - Constant head permeability testing in accordance with ASTM D2434 shall be conducted on a minimum of two samples with a 6-inch mold and vacuum saturation.

7. Mulch for Bioretention/Biofiltration Facilities

Mulch is recommended for the purpose of retaining moisture, preventing erosion and minimizing weed growth. Projects subject to the State’s Model Water Efficiency

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Landscaping Ordinance (or comparable local ordinance) will be required to provide at least two inches of mulch. Aged mulch, also called compost mulch, reduces the ability of weeds to establish, keeps soil moist, and replenishes soil nutrients. Aged mulch can be obtained through soil suppliers or directly from commercial recycling yards. It is recommended to apply 1" to 2" of composted mulch, once a year, preferably in June following weeding

8. Plants

- a. Plant materials should be tolerant of summer drought, ponding fluctuations, and saturated soil conditions for 48 to 96 hours.
- b. It is recommended that a minimum of three types of tree, shrubs, and/or herbaceous groundcover species be incorporated to protect against facility failure due to disease and insect infestations of a single species.
- c. Native plant species and/or hardy cultivars that are not invasive and do not require chemical inputs should be used to the maximum extent practicable.

References

California Regional Water Quality Control Board, San Francisco Bay Region. 2011. Municipal Regional Stormwater Permit (Order No. R2-2011-0083, Attachment L). Adopted November 28, 2011.

Dan Cloak, Dan Cloak Environmental Consulting to Tom Dalziel, Contra Costa County, February 22, 2011.< <http://www.cccleanwater.org/c3-guidebook.html>>. Accessed on January 31, 2012.

Geosyntec Consultants and Larry Walker Associates. 2011. *Ventura County Technical Guidance Manual for Stormwater Quality Control Measures, Manual Update 2011. Appendix D*. Prepared for the Ventura Countywide Stormwater Quality Management Program. July 13, 2011.

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ATTACHMENT I. DEVELOPER TECHNICAL INFORMATION AND GUIDELINES

1. Each Permittee shall make available to the Development Community reference information and recommended guidelines. Such information may include the following:
 - a. Hydromodification Control criteria described in this Order, including numerical criteria
 - b. Links to the State Water Board's Water Balance Calculator
 - c. Expected BMP pollutant removal performance including effluent quality (ASCE/ U.S. EPA International BMP Database, CASQA New Development BMP Handbook, technical reports, local data on BMP performance, and the scientific literature appropriate for southern California geography and climate)
 - d. Selection of appropriate BMPs for stormwater pollutants of concern
 - e. Data on observed local effectiveness and performance of implemented BMPs
 - f. BMP maintenance and cost considerations
 - g. Guiding principles to facilitate integrated water resources planning and management in the selection of BMPs, including water conservation, groundwater recharge, public recreation, multipurpose parks, open space preservation, and existing retrofits
 - h. LID principles and specifications, including the objectives and specifications for integration of LID strategies in the areas of:
 - i. Site Assessment
 - ii. Site Planning and Design
 - iii. Vegetative Protection, Revegetation, and Maintenance
 - iv. Techniques to Minimize Land Disturbance
 - v. Techniques to Implement LID Measures at Various Scales
 - vi. Integrated Water Resources Management Practices
 - vii. LID Design and Flow Modeling Guidance
 - viii. Hydrologic Analysis
 - ix. LID Credits for trees or other features that intercept storm water runoff.
 - i. Recommended Guidelines to include:
 - i. Locate structures on less pervious soils where possible so as to preserve areas with permeable soils (Hydrologic Soil Group Classes A and B, as defined by the National Cooperative Soil Survey), for use in stormwater infiltration and groundwater recharge. Minimize the need to grade the site by concentrating development in areas with minimal non-engineered slopes and existing infrastructure, and mitigate any construction disturbance.
 - ii. The total disturbed area shall be no greater than 110 percent of the final project footprint plus the area of the construction stormwater detention basins, if any, and as required to meet applicable Fire Department regulations for brush clearance.

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- iii. Construction vehicles shall be confined at all times to the area specifically permitted to be disturbed by construction as depicted in the approved construction documents. Physical barriers shall be used to designate and protect the boundary between disturbed and undisturbed areas.
 - iv. Materials staging shall be confined to the area permitted to be disturbed by construction or may be temporarily stored off-site at an approved location at the Contractor's option.
 - v. Construction vehicles shall not traverse areas within the drip lines of those trees and other landscaping to be preserved. Approved visible physical barriers, such as continuous fencing, shall be provided to completely surround all trees and other landscaping to be preserved. Barriers shall be placed not less than 5 feet outside the drip lines of trees.
 - vi. Preserve or restore continuous riparian buffers widths along all natural drainages to a minimum width of 100 feet from each bank top, for a total of 200 feet plus the width of the stream, unless the Watershed Plan demonstrates that a smaller riparian buffer width is protective of water quality, hydrology, and aquatic life beneficial uses within a specific drainage.
 - vii. Identify and avoid development of areas containing habitat with threatened or endangered plant and animal species².
- j. Each Permittee shall facilitate implementation of LID by providing key industry, regulatory, and other stakeholders with information regarding LID objectives and specifications through a training program. The LID training program will include the following:
- i. LID targeted sessions and materials for builders, design professionals, regulators, resource agencies, and stakeholders
 - ii. A combination of awareness on national efforts and local experience gained through LID pilot projects and demonstration projects
 - iii. Materials and data from LID pilot projects and demonstration projects including case studies
 - iv. Guidance on how to integrate LID requirements at various project scales
 - v. Guidance on the relationship among LID strategies, Source Control BMPs, Treatment Control BMPs, and Hydromodification Control requirements

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² Federal Endangered Species Act, 16 U.S.C. §§ 1531–1544 (<http://water.epa.gov/lawsregs/guidance/wetlands/eo11990.cfm>); California Endangered Species Act, California Fish and Game Code, §§ 2050 to 2115.5.

ATTACHMENT J. DETERMINATION OF EROSION POTENTIAL

E_p is determined as follows- The *total effective work* done on the channel boundary is derived and used as a metric to predict the likelihood of channel adjustment given watershed and stream hydrologic and geomorphic variables. The index under urbanized conditions is compared to the index under pre-urban conditions expressed as a ratio (E_p). The effective work index (W) can be computed in a number of different ways including simplistic work equations, material specific sediment transport equations, or more complex functions based on site calibrated sediment rating curves. One such work equation, which represents the total work done on the channel boundary, includes the following ~~is computed as the excess shear stress that exceeds a critical value for streambed mobility or bank material erosion integrated over time and represents the total work done on the channel boundary:~~

$$W = \sum_{i=1}^n (\tau_i - \tau_c)^{1.5} \cdot V \cdot \Delta t_i \quad (1)$$

Where: W = effective work, τ_c = critical shear stress that initiates bed mobility or erodes the weakest bank layer, τ_i = applied hydraulic shear stress, Δt = duration of flows (in hours), V = mid-channel flow velocity, and n = length of flow record. The effective work index for presumed stable stream channels under pre-urban conditions is compared to stable and unstable channels under current urbanized conditions. ~~Where τ_c = critical shear stress that initiates bed mobility or erodes the weakest bank layer, τ_i = applied hydraulic shear stress, Δt = duration of flows (in hours), and n = length of flow record. The effective work index for presumed stable stream channels under pre-urban conditions is compared to stable and unstable channels under current urbanized conditions. The comparison, expressed as a ratio, is defined as the Erosion Potential (E_p)³ (McRae (1992, 1996).~~

$$E_p = \frac{W_{post}}{W_{pre}} \quad (2)$$

where:

W_{post} = work index estimated for the post-urban condition

W_{pre} = work index estimated for the pre-urban condition

³ MacRae, C.R. 1992. The Role of Moderate Flow Events and Bank Structure in the Determination of Channel Response to Urbanization. Resolving conflicts and uncertainty in water management: Proceedings of the 45th Annual Conference of the Canadian Water Resources Association. Shrubsole, D, ed. 1992, pg. 12.1-12.21; MacRae, C.R. 1996. Experience from Morphological Research on Canadian Streams: Is Control of the Two-Year Frequency Runoff Event the Best Basis for Stream Channel Protection. Effects of Watershed Development and Management on Aquatic Ecosystems, ASCE Engineering Foundation Conference, Snowbird, Utah, pg. 144-162.

Alternatively, a sediment transport function such as the Brownlie equation or the Meyer-Peter and Muller equation (US Department of Agriculture, Natural Resources Conservation Service, 2007. Part 654 Stream Restoration Design, National Engineering Handbook, August 2007) can be used to demonstrate appropriate Hydromodification control.

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ATTACHMENT K. PERMITTEES AND TMDLS MATRIX

Note: For all tables in this Attachment, Permittees listed in *italics* are Multi-Jurisdictional Permittees.

Table K-1: Santa Clara River Watershed Management Area TMDLs

SANTA CLARA RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS			
	Santa Clara River Nitrogen Compounds TMDL	Upper Santa Clara River Chloride TMDL	Lake Elizabeth, Munz Lake, and Lake Hughes Trash TMDL	Santa Clara River Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL
<i>Los Angeles (County of)</i>	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X
<i>Santa Clarita</i>	X	X		X

Table K-2: Santa Monica Bay Watershed Management Area TMDLs

SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS					
				Malibu Creek Subwatershed		
	Santa Monica Bay Beaches Bacteria TMDL (Wet and Dry Weather)	Santa Monica Bay Nearshore and Offshore Debris TMDL	Santa Monica Bay TMDL for DDTs and PCBs	Malibu Creek and Lagoon Bacteria TMDL	Malibu Creek Watershed Trash TMDL	Malibu Creek Nutrient TMDL
<i>Agoura Hills</i>	X	X	X	X	X	X
<i>Beverly Hills</i>	X	X	X			
<i>Calabasas</i>	X	X	X	X	X	X
<i>Culver City</i>	X	X	X			
<i>El Segundo</i>	X	X	X			
<i>Hermosa Beach</i>	X	X	X			
<i>Hidden Hills</i>	X	X	X	X	X	X
<i>Inglewood</i>	X	X	X			

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SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS					
				Malibu Creek Subwatershed		
	Santa Monica Bay Beaches Bacteria TMDL (Wet and Dry Weather)	Santa Monica Bay Nearshore and Offshore Debris TMDL	Santa Monica Bay TMDL for DDTs and PCBs	Malibu Creek and Lagoon Bacteria TMDL	Malibu Creek Watershed Trash TMDL	Malibu Creek Nutrient TMDL
<i>Los Angeles (City of)</i>	X	X	X			
<i>Los Angeles (County of)</i>	X	X	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X	X	X
Malibu	X	X	X	X	X	X
<i>Manhattan Beach</i>	X	X	X			
<i>Palos Verdes Estates</i>	X	X	X			
<i>Rancho Palos Verdes</i>	X	X	X			
<i>Redondo Beach</i>	X	X	X			
<i>Rolling Hills</i>	X	X	X			
<i>Rolling Hills Estates</i>	X	X	X			
Santa Monica	X	X	X			
<i>Torrance</i>	X	X	X			
<i>West Hollywood</i>	X	X	X			
<i>Westlake Village</i>	X	X	X	X	X	X

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Table K-3: Santa Monica Bay Watershed Management Area TMDLs

SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS						
	Ballona Creek Subwatershed					Marina del Rey Subwatershed	
	Ballona Creek Trash TMDL	Ballona Creek Estuary Toxic Pollutants TMDL	Ballona Creek, Ballona estuary and Sepulveda Channel Bacteria TMDL	Ballona Creek Metals TMDL	Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation	Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL	Marina del Rey Harbor Toxic Pollutants TMDL
Agoura Hills							
Beverly Hills	X	X	X	X	X		
Calabasas							
Culver City	X	X	X	X	X	X	X
El Segundo							
Hermosa Beach							
Hidden Hills							
Inglewood	X	X	X	X	X		
Los Angeles (City of)	X	X	X	X	X	X	X
Los Angeles (County of)	X	X	X	X	X	X	X
Los Angeles County Flood Control		X	X	X	X	X	X
Malibu							
Manhattan Beach							
Palos Verdes Estates							
Rancho Palos Verdes							
Redondo Beach							
Rolling Hills							
Rolling Hills Estates							

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SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS						
	Ballona Creek Subwatershed					Marina del Rey Subwatershed	
	Ballona Creek Trash TMDL	Ballona Creek Estuary Toxic Pollutants TMDL	Ballona Creek, Ballona estuary and Sepulveda Channel Bacteria TMDL	Ballona Creek Metals TMDL	Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation	Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL	Marina del Rey Harbor Toxic Pollutants TMDL
Santa Monica	X	X	X	X	X		
<i>Torrance</i>							
West Hollywood	X	X	X	X	X		
Westlake Village							

Table K-4: Dominguez Channel Watershed Management Area TMDLs

DOMINGUEZ CHANNEL WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS				
	Los Angeles Harbor Bacteria TMDL	Machado Lake Trash TMDL	Machado Lake Nutrient TMDL	Machado Lake Pesticides and PCBs TMDL	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Carson</i>		X	X	X	X
<i>Compton</i>					X
El Segundo					X
Gardena					X
Hawthorne					X
<i>Inglewood</i>					X
Lawndale					X
Lomita		X	X	X	
<i>Los Angeles (City of)</i>	X	X	X	X	X
<i>Los Angeles (County of)</i>	X	X	X	X	X
<i>Los Angeles County Flood Control</i>		X	X	X	X

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DOMINGUEZ CHANNEL WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS				
	Los Angeles Harbor Bacteria TMDL	Machado Lake Trash TMDL	Machado Lake Nutrient TMDL	Machado Lake Pesticides and PCBs TMDL	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Manhattan Beach</i>					X
<i>Palos Verdes Estates</i>		X	X	X	
<i>Rancho Palos Verdes</i>		X	X	X	X-
<i>Redondo Beach</i>		X	X	X	X
<i>Rolling Hills</i>		X	X	X	X-
<i>Rolling Hills Estates</i>		X	X	X	X-
<i>Torrance</i>		X	X	X	X

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Table K-5: Los Angeles River Watershed Management Area TMDLs

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS							
	Los Angeles River Watershed Trash TMDL	Los Angeles River Nitrogen Compounds and Related Effects TMDL	Los Angeles River and Tributaries Metals TMDL	Los Angeles River Watershed Bacteria TMDL	<u>Legg Lake Trash TMDL</u>	Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL	Los Angeles Area Lake TMDLs for Lake Calabasas, Echo Park Lake, <u>Legg Lake</u> and Peck Road Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Alhambra</i>	X	X	X	X				
<i>Arcadia</i>	X	X	X	X			X	
<i>Bell</i>	X	X	X	X				
<i>Bell Gardens</i>	X	X	X	X				
<i>Bradbury</i>	X	X	X	X			X	
<i>Burbank</i>	X	X	X	X				
<i>Calabasas</i>	X	X	X	X			X	
<i>Carson</i>	X	X	X	X				
<i>Commerce</i>	X	X	X	X				

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LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS							
	Los Angeles River Watershed Trash TMDL	Los Angeles River Nitrogen Compounds and Related Effects TMDL	Los Angeles River and Tributaries Metals TMDL	Los Angeles River Watershed Bacteria TMDL	Legg Lake Trash TMDL	Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL	Los Angeles Area Lake TMDLs for Lake Calabastas, Echo Park Lake, Legg Lake and Peck Road Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Compton</i>	X	X	X	X				X
<i>Cudahy</i>	X	X	X	X				
<i>Downey</i>	X	X	X	X				
<i>Duarte</i>	X	X	X	X			X	
<i>El Monte</i>	X	X	X	X	X		X	
<i>Glendale</i>	X	X	X	X				
<i>Hidden Hills</i>	X	X	X	X				
<i>Huntington Park</i>	X	X	X	X				
<i>Inglewood</i>								
<i>Irwindale</i>	X	X	X	X			X	
<i>La Canada Flintridge</i>	X	X	X	X				
<i>Lakewood</i>	X	X						X
<i>Los Angeles (City of)</i>	X	X	X	X			X	X
<i>Los Angeles (County of)</i>	X	X	X	X	X		X	X
<i>Los Angeles County Flood Control</i>		X	X	X	X	X	X	X
<i>Lynwood</i>	X	X	X	X				
<i>Maywood</i>	X	X	X	X				
<i>Monrovia</i>	X	X	X	X			X	
<i>Montebello</i>	X	X	X	X				
<i>Monterey Park</i>	X	X	X	X				
<i>Paramount</i>	X	X	X	X				X

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LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS							
	Los Angeles River Watershed Trash TMDL	Los Angeles River Nitrogen Compounds and Related Effects TMDL	Los Angeles River and Tributaries Metals TMDL	Los Angeles River Watershed Bacteria TMDL	Legg Lake Trash TMDL	Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL	Los Angeles Area Lake TMDLs for Lake Calabastas, Echo Park Lake, Legg Lake and Peck Road Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
Pasadena	X	X	X	X				
Pico Rivera	X	X	X	X				
Rosemead	X	X	X	X				
San Fernando	X	X	X	X				
San Gabriel	X	X	X	X				
San Marino	X	X	X	X				
Santa Clarita	X	X	X	X				
Sierra Madre	X	X	X	X			X	
Signal Hill	X	X	X	X		X		X
South El Monte	X	X	X	X	X		X	
South Gate	X	X	X	X				
South Pasadena	X	X	X	X				
Temple City	X	X	X	X				
Vernon	X	X	X	X				

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Table K-6: San Gabriel River Watershed Management Area TMDLs

SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS			
	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL	Legg Lake Trash TMDL	Los Angeles Area Lakes TMDLs for Legg Lake, Puddingstone Reservoir, and Santa Fe Dam Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL

SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS			
	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL	Legg Lake Trash TMDL	Los Angeles Area Lakes TMDLs for Legg Lake, Puddingstone Reservoir, and Santa Fe Dam Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Arcadia</i>	X			
<i>Artesia</i>	X			
<i>Azusa</i>	X		X	
<i>Baldwin Park</i>	X			
<i>Bellflower</i>	X			X
<i>Bradbury</i>	X			
<i>Cerritos</i>	X			
<i>Claremont</i>	X		X	
<i>Covina</i>	X			
<i>Diamond Bar</i>	X			
<i>Downey</i>	X			
<i>Duarte</i>	X			
<i>El Monte</i>	X	X	X	
<i>Glendora</i>	X			
<i>Hawaiian Gardens</i>	X			
<i>Industry</i>	X			
<i>Irwindale</i>	X		X	
<i>La Habra Heights</i>	X			
<i>La Mirada</i>	X			
<i>La Puente</i>	X			
<i>La Verne</i>	X		X	
<i>Lakewood</i>	X			
<i>Los Angeles (County of)</i>	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X
<i>Monrovia</i>	X-			

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SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS			
	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL	Legg Lake Trash TMDL	Los Angeles Area Lakes TMDLs for Legg Lake , Puddingstone Reservoir, and Santa Fe Dam Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
Norwalk	X			
<i>Pico Rivera</i>	X			
Pomona	X		X	
San Dimas	X		X	
Santa Fe Springs	X			
South El Monte	X	X	X	
Walnut	X			
West Covina	X			
Whittier	X			

Table K-7: Los Cerritos Channel and Alamitos Bay Watershed Management Area TMDLs

LOS CERRITOS CHANNEL AND ALAMITOS BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS		
	Los Cerritos Channel Metals TMDL	Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Bellflower</i>	X		X
<i>Cerritos</i>	X		
<i>Downey</i>	X		
<i>Lakewood</i>	X		
<i>Los Angeles (County of)</i>	X		X
<i>Los Angeles County Flood Control</i>	X	X	X
<i>Paramount</i>	X		
<i>Signal Hill</i>	X		

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Table K-8: Middle Santa Ana River Watershed Management Area TMDLs

MIDDLE SANTA ANA RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDL
	Middle Santa Ana River Watershed Bacterial Indicator TMDL
Claremont	X
Pomona	X

Table K-9: Los Angeles River Watershed Management Area Metals TMDLs by Reach

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River and Tributaries Metals TMDL				
	Reach 1 and Compton Creek	Reach 2, Rio Hondo, Arroyo Seco, and all contributing subwatersheds	Reach 3, Verdugo Wash, and Burbank Western Channel	Reach 4, Reach 5, Tujunga Wash, and all contributing subwatersheds	Reach 6, Bell Creek, and all contributing subwatersheds
Alhambra		X			
Arcadia		X			
Bell		X			
Bell Gardens		X			
Bradbury		X			
Burbank			X	X	
Calabasas					X
Carson	X				
Commerce		X			
Compton	X	X			
Cudahy		X			
Downey		X			
Duarte		X			
El Monte		X			
Glendale		X	X	X	
Hidden Hills					X

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LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River and Tributaries Metals TMDL				
	Reach 1 and Compton Creek	Reach 2, Rio Hondo, Arroyo Seco, and all contributing subwatersheds	Reach 3, Verdugo Wash, and Burbank Western Channel	Reach 4, Reach 5, Tujunga Wash, and all contributing subwatersheds	Reach 6, Bell Creek, and all contributing subwatersheds
<i>Huntington Park</i>	X	X			
<i>Inglewood</i>					
<i>Irwindale</i>		X			
<i>La Canada Flintridge</i>		X	X		
<i>Lakewood</i>					
<i>Los Angeles (City of)</i>	X	X	X	X	X
<i>Los Angeles (County of)</i>	X	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X	X
<i>Lynwood</i>	X	X			
<i>Maywood</i>		X			
<i>Monrovia</i>		X			
<i>Montebello</i>		X			
<i>Monterey Park</i>		X			
<i>Paramount</i>		X			
<i>Pasadena</i>		X	X		
<i>Pico Rivera</i>		X			
<i>Rosemead</i>		X			
<i>San Fernando</i>				X	
<i>San Gabriel</i>		X			
<i>San Marino</i>		X			
<i>Santa Clarita</i>					
<i>Sierra Madre</i>		X			
<i>Signal Hill</i>	X				
<i>South El Monte</i>		X			
<i>South Gate</i>	X	X			
<i>South Pasadena</i>		X			

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LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River and Tributaries Metals TMDL				
	Reach 1 and Compton Creek	Reach 2, Rio Hondo, Arroyo Seco, and all contributing subwatersheds	Reach 3, Verdugo Wash, and Burbank Western Channel	Reach 4, Reach 5, Tujunga Wash, and all contributing subwatersheds	Reach 6, Bell Creek, and all contributing subwatersheds
Temple City		X			
Vernon		X			

Table K-10: Los Angeles River Watershed Management Area Bacteria TMDL by Reach

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River Watershed Bacteria TMDL																
	Los Angeles River Segment					Los Angeles River Tributary											
	A	B	C	D	E	Aliso Canyon Wash	Arroyo Seco	Bell Creek	Bull Creek	Burbank Western Channel	Compton Creek	Dry Canyon Creek	McCoy Canyon Creek	Rio Hondo	Tujunga Wash	Verdugo Wash	
Alhambra		X												X			
Arcadia														X			
Bell		X															
Bell Gardens		X												X			
Bradbury														X			
Burbank			X						X								
Calabasas											X	X					
Carson										X							
Commerce		X												X			
Compton	X	X								X							
Cudahy		X															
Downey		X												X			
Duarte														X			
El Monte														X			
Glendale		X	X				X		X						X	X	

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LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River Watershed Bacteria TMDL															
	Los Angeles River Segment					Los Angeles River Tributary										
	A	B	C	D	E	Aliso Canyon Wash	Arroyo Seco	Bell Creek	Bull Creek	Burbank Western Channel	Compton Creek	Dry Canyon Creek	McCoy Canyon Creek	Rio Hondo	Tujunga Wash	Verdugo Wash
<i>Hidden Hills</i>								X				X				
<i>Huntington Park</i>		X								X						
<i>Inglewood</i>																
<i>Irwindale</i>													X			
<i>La Canada Flintridge</i>			X				X									X
<i>Lakewood</i>	X															
<i>Los Angeles (City of)</i>		X	X	X	X	X	X	X	X	X	X	X	X		X	X
<i>Los Angeles (County of)</i>	X	X	X		X	X	X	X	X		X	X	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Lynwood</i>	X	X									X					
<i>Maywood</i>		X														
<i>Monrovia</i>													X			
<i>Montebello</i>		X											X			
<i>Monterey Park</i>		X											X			
<i>Paramount</i>	X	X														
<i>Pasadena</i>		X	X				X							X		X
<i>Pico Rivera</i>														X		
<i>Rosemead</i>														X		
<i>San Fernando</i>															X	
<i>San Gabriel</i>														X		
<i>San Marino</i>														X		
<i>Santa Clarita</i>									X							

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LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River Watershed Bacteria TMDL																
	Los Angeles River Segment					Los Angeles River Tributary											
	A	B	C	D	E	Aliso Canyon Wash	Arroyo Seco	Bell Creek	Bull Creek	Burbank Western Channel	Compton Creek	Dry Canyon Creek	McCoy Canyon Creek	Rio Hondo	Tujunga Wash	Verdugo Wash	
Sierra Madre														X			
Signal Hill	X																
South El Monte														X			
South Gate		X								X				X			
South Pasadena		X					X							X			
Temple City														X			
Vernon		X															

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Table K-11: Santa Monica Bay Watershed Management Area Bacteria TMDL by Reach

SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	Santa Monica Bay Beaches Bacteria TMDL (Wet and Dry Weather)								
	Jurisdiction Group 1	Jurisdiction Group 2	Jurisdiction Group 3	Jurisdiction Group 4	Jurisdiction Group 5	Jurisdiction Group 6	Jurisdiction Group 7	Jurisdiction Group 8	Jurisdiction Group 9
Agoura Hills									X
Beverly Hills								X	
Calabasas	X								X
Culver City								X	
El Segundo		X			X				
Hermosa Beach					X	X			
Hidden Hills									X
Inglewood								X	
Los Angeles (City of)	X	X	X				X	X	

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SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	Santa Monica Bay Beaches Bacteria TMDL (Wet and Dry Weather)								
	Jurisdiction Group 1	Jurisdiction Group 2	Jurisdiction Group 3	Jurisdiction Group 4	Jurisdiction Group 5	Jurisdiction Group 6	Jurisdiction Group 7	Jurisdiction Group 8	Jurisdiction Group 9
<i>Los Angeles (County of)</i>	X	X		X	X	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X	X	X	X	X	X
Malibu	X			X					X
<i>Manhattan Beach</i>					X	X			
<i>Palos Verdes Estates</i>							X		
<i>Rancho Palos Verdes</i>							X		
<i>Redondo Beach</i>						X			
<i>Rolling Hills</i>							X		
<i>Rolling Hills Estates</i>							X		
Santa Monica		X	X					X	
<i>Torrance</i>						X			
West Hollywood								X	
Westlake Village									X

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Table K-12: San Gabriel River Watershed Management Area Metals TMDLs by Reach

SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL							
	Walnut Creek	San Jose Creek	Coyote Creek	San Gabriel River Reach 1	San Gabriel River Reach 2	San Gabriel River Reach 3	San Gabriel River Reach 4	San Gabriel River Reach 5
<i>Arcadia</i>							X	
<i>Artesia</i>			X	X				
<i>Azusa</i>	X							X
<i>Baldwin Park</i>	X					X	X	
<i>Bellflower</i>				X				
<i>Bradbury</i>								
<i>Cerritos</i>			X	X				
<i>Claremont</i>	X	X						
<i>Covina</i>	X							
<i>Diamond Bar</i>		X	X					
<i>Downey</i>				X	X			
<i>Duarte</i>								X
<i>El Monte</i>						X	X	
<i>Glendora</i>	X							X
<i>Hawaiian Gardens</i>			X					
<i>Industry</i>	X	X			X	X		
<i>Irwindale</i>	X					X	X	X
<i>La Habra Heights</i>		X	X					
<i>La Mirada</i>			X					
<i>La Puente</i>	X	X				X		
<i>La Verne</i>	X	X						
<i>Lakewood</i>			X	X				
<i>Los Angeles (County of)</i>	X	X	X		X	X		X
<i>Los Angeles County Flood Control</i>	X	X	X	X	X	X	X	X

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SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL							
	Walnut Creek	San Jose Creek	Coyote Creek	San Gabriel River Reach 1	San Gabriel River Reach 2	San Gabriel River Reach 3	San Gabriel River Reach 4	San Gabriel River Reach 5
Monrovia								X-
Norwalk			X	X				
Pico Rivera					X	X		
Pomona	X	X						
San Dimas	X	X						
Santa Fe Springs			X	X	X			
South El Monte						X		
Walnut	X	X						
West Covina	X	X						
Whittier		X	X		X	X		

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Table K-13: Dominguez Channel Watershed Management Area Toxics TMDL by Reach

DOMINGUEZ CHANNEL WATERSHED MANAGEMENT AREA PERMITTEES	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL					
	Dominguez Channel	Dominguez Channel Estuary	Greater Los Angeles and Long Beach Harbors	Los Angeles River Estuary	Consolidated Slip	Los Angeles River and San Gabriel River
Bellflower			X			
Carson	X	X				
Compton	X	X				
El Segundo	X					
Gardena	X	X				
Hawthorne	X					
Inglewood	X					
Lakewood			X			
Lawndale	X					

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DOMINGUEZ CHANNEL WATERSHED MANAGEMENT AREA PERMITTEES	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL					
	<u>Dominguez Channel</u>	<u>Dominguez Channel Estuary</u>	<u>Greater Los Angeles and Long Beach Harbors</u>	<u>Los Angeles River Estuary</u>	<u>Consolidated Slip</u>	<u>Los Angeles River and San Gabriel River</u>
<u>Los Angeles (City of)</u>	X	X	X	X	X	
<u>Los Angeles (County of)</u>	X	X	X	X	X	
<u>Los Angeles County Flood Control District</u>	X	X	X	X	X	
<u>Manhattan Beach</u>	X					
<u>Paramount</u>			X			
<u>Rancho Palos Verdes</u>			X			
<u>Redondo Beach</u>	X					
<u>Rolling Hills</u>			X			
<u>Rolling Hills Estates</u>			X			
<u>Signal Hill</u>			X	X		
<u>Torrance</u>	X	X				
<u>Los Angeles River and San Gabriel River Metals TMDLs Responsible Parties¹</u>						see footnote 1 below

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¹ Permittees subject to the Los Angeles River Metals TMDL and the San Gabriel River Metals TMDL are required to submit a monitoring plan and a report of implementation.

ATTACHMENT L. TMDLs IN THE SANTA CLARA RIVER WATERSHED MANAGEMENT AREA (WMA)

A. Santa Clara River Nitrogen Compounds TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-1.
2. Permittees shall comply with the following water quality-based effluent limitations for discharges to the Santa Clara River Reach 5⁴ as of the effective date of this Order:

Constituent	Effluent Limitations (mg/L)	
	1-hour Average	30-day Average
Total Ammonia as Nitrogen	5.2	1.75
Nitrate as Nitrogen plus Nitrite as Nitrogen	--	6.8

B. Upper Santa Clara River Chloride TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-1.
2. Permittees shall comply with the following water quality-based effluent limitation for discharges to the Santa Clara River Reaches 5 and 6 as of the effective date of this Order:

Constituent	Effluent Limitation Instantaneous Maximum (mg/L)
Chloride	100

C. Lake Elizabeth Trash TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-1.
2. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Lake Elizabeth no later than March 6, 2016 and every year thereafter.
3. Permittees shall comply with interim and final water quality-based effluent limitations for trash discharged to Lake Elizabeth, per the schedule below:

Deadline	Effluent Limitation	
	Drainage Area covered by Full Capture Systems (%)	Annual Trash Discharge (gal/yr)
Baseline	0	529
March 6, 2012	20	423
March 6, 2013	40	317
March 6, 2014	60	212
March 6, 2015	80	106
March 6, 2016	100	0

4. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in C.2 and C.3 above per the provisions in Part VI.E.5.

⁴ The Basin Plan Chapter 7-9 Santa Clara River Nitrogen Compounds TMDL uses the USEPA Santa Clara River reach designations. The USEPA's Santa Clara River Reach 7 corresponds to Santa Clara River Reach 5 in the Los Angeles Region's Basin Plan Chapter 2.

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D. Santa Clara River Indicator Bacteria TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-1.
2. Permittees shall comply with the following final water quality-based effluent limitations for discharges to the Santa Clara River Reaches 5, 6 and 7 during dry weather no later than March 21, 2023 and during wet weather⁵ no later than March 21, 2029:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
E. coli	235/100 mL	126/100 mL

3. Receiving Water Limitations

- a. Permittees shall comply with the following interim bacteria receiving water limitations⁶ for the Santa Clara River Reaches 5, 6, and 7:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)		Deadline
	Daily Sampling	Weekly Sampling	
Dry Weather	17	3	March 21, 2016
Wet Weather	61	9	March 21, 2016

- b. Permittees shall comply with the following final bacteria receiving water limitations⁷ for the Santa Clara River Reaches 5, 6, and 7:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)		Deadline
	Daily Sampling	Weekly Sampling	
Dry Weather	5	1	March 21, 2023
Wet Weather	16	3	March 21, 2029

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⁵ Wet weather is defined as days with 0.1 inch of rain or more and the three days following the rain event.

⁶ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the sub-drainage area to each reach.

⁷ Ibid.

- c. Permittees shall comply with the following geometric mean receiving water limitation for the Santa Clara River Reaches 5, 6, and 7 during dry weather no later than March 21, 2023 and during wet weather no later than March 21, 2029:

Constituent	Geometric Mean (MPN or cfu)
E. coli	126/100 mL

- d. Permittees may propose wet-weather load-based compliance at MS4 outfalls. The plan shall include an estimate of existing load and the allowable load from MS4 outfalls to attain the allowable number of exceedance days instream. The plan shall include a technically defensible quantitative linkage to the allowable number of exceedance days. The plan shall include quantitative estimates of the water quality benefits provided by the proposed implementation approach.

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ATTACHMENT M. TMDLs IN THE SANTA MONICA BAY WATERSHED MANAGEMENT AREA

A. Santa Monica Bay Beaches Bacteria TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-2.
2. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Santa Monica Bay beaches during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

3. Receiving Water Limitations
 - a. Permittees in each defined jurisdictional group shall comply with the interim single sample bacteria receiving water limitations for shoreline monitoring stations within their jurisdictional area during wet weather, per the schedule below:

Deadline	Cumulative percentage reduction from the total exceedance day reductions required for each jurisdictional group as identified in Table 1
July 15, 2013	25%
July 15, 2018	50%

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Table M-1: Interim Single Sample Bacteria Receiving Water Limitations by Jurisdictional Group

Jurisdiction Group	Primary Jurisdiction	Additional Responsible Jurisdictions & Agencies	Subwatershed(s)	Monitoring Site(s)	Interim Single Sample Bacteria Receiving Water Limitations as Maximum Allowable Exceedance Days during Wet Weather		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
1	County of Los Angeles	Malibu City of Los Angeles (Topanga only) Calabasas (Topanga only)	Arroyo Sequit	SMB 1-1	221	212	197
			Carbon Canyon	SMB 1-13			
			Corral Canyon	SMB 1-11, SMB 1-12			
			Encinal Canyon	SMB 1-3			
			Escondido Canyon	SMB 1-8			
			Las Flores Canyon	SMB 1-14			
			Latigo Canyon	SMB 1-9			
			Los Alisos Canyon	SMB 1-2			
			Pena Canyon	SMB 1-16			
			Piedra Gorda Canyon	SMB 1-15			
			Ramirez Canyon	SMB 1-6, SMB 1-7			
			Solstice Canyon	SMB 1-10			
			Topanga Canyon	SMB 1-18			
			Trancas Canyon	SMB 1-4			
			Tuna Canyon	SMB 1-17			
Zuma Canyon	SMB 1-5						
2	City of Los Angeles	County of Los Angeles El Segundo (DW only) Manhattan Beach (DW only) Culver City (MDR only) Santa Monica	Castlerock	SMB 2-1	342	324	294
			Dockweiler	SMB 2-10, SMB 2-11, SMB 2-12, SMB 2-13, SMB 2-14, SMB 2-15			
			Marina del Rey	SMB 2-8, SMB 2-9			
			Pulga Canyon	SMB 2-4, SMB 2-5			

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Jurisdiction Group	Primary Jurisdiction	Additional Responsible Jurisdictions & Agencies	Subwatershed(s)	Monitoring Site(s)	Interim Single Sample Bacteria Receiving Water Limitations as Maximum Allowable Exceedance Days during Wet Weather		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
			Santa Monica Canyon	SMB 2-7			
			Santa Ynez Canyon	SMB 2-2, SMB 2-3, SMB 2-6			
3	Santa Monica	City of Los Angeles County of Los Angeles	Santa Monica	SMB 3-1, SMB 3-2, SMB 3-3, SMB 3-4, SMB 3-5, SMB 3-6, SMB 3-7, SMB 3-8 [#] , SMB 3-9	257	237	203
4	Malibu	County of Los Angeles	Nicholas Canyon	SMB 4-1 [#]	14	14	14
5	Manhattan Beach	El Segundo Hermosa Beach Redondo Beach	Hermosa	SMB 5-1 [#] , SMB 5-2, SMB 5-3 [#] , SMB 5-4 [#] , SMB 5-5 [#]	29	29	29
6	Redondo Beach	Hermosa Beach Manhattan Beach Torrance County of Los Angeles	Redondo	SMB 6-1, SMB 6-2 [#] , SMB 6-3, SMB 6-4, SMB 6-5 [#] , SMB 6-6 [#]	58	57	56

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Jurisdiction Group	Primary Jurisdiction	Additional Responsible Jurisdictions & Agencies	Subwatershed(s)	Monitoring Site(s)	Interim Single Sample Bacteria Receiving Water Limitations as Maximum Allowable Exceedance Days during Wet Weather		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
7	Rancho Palos Verdes	City of Los Angeles Palos Verdes Estates Redondo Beach Rolling Hills Rolling Hills Estates Torrance County of Los Angeles	Palos Verdes Peninsula	SMB 7-1 [#] , SMB 7-2 [#] , SMB 7-3 [#] , SMB 7-4 [#] , SMB 7-5 [#] , SMB 7-6 [#] , SMB 7-7, SMB 7-8 [#] , SMB 7-9 [#]	36	36	36

For those beach monitoring locations subject to the antidegradation provision, there shall be no increase in exceedance days during the implementation period above that estimated for the beach monitoring location in the critical year.

* The California Department of Transportation (Caltrans) is a responsible agency in each Jurisdiction Group and is jointly responsible for complying with the allowable number of exceedance days. Caltrans is separately regulated under the Statewide Storm Water Permit for State of California Department of Transportation (NPDES No. CAS000003).

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- b. Permittees shall comply with the following grouped⁸ final single sample bacteria receiving water limitations for all shoreline monitoring stations along Santa Monica Bay beaches, except for those monitoring stations subject to the antidegradation implementation provision as established in the TMDL and identified in subpart c. below, during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2021:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
	Daily Sampling	Weekly Sampling
Summer Dry-Weather (April 1 to October 31)	0	0
Winter Dry-Weather (November 1 to March 31)	3	1
Wet Weather ⁹	17	3

- c. Permittees shall comply with the following grouped² final single sample bacteria receiving water limitations for shoreline monitoring stations along Santa Monica Bay beaches subject to the antidegradation provision as of the effective date of this Order:

		Annual Allowable Exceedance Days of the Single Sample Objective (days)			
Station ID	Beach Monitoring Location	Winter Dry Weather (November 1 – March 31)		Wet Weather (November 1 – October 31)	
		Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
SMB 1-4	Trancas Creek at Broad Beach	0	0	17	3
SMB 1-5	Zuma Creek at Zuma Beach	0	0	17	3
SMB 2-13	Imperial Highway storm drain	2	1	17	3
SMB 3-8	Windward Ave. storm drain at Venice Pavilion	2	1	13	2
SMB 4-1	San Nicholas Canyon Creek at Nicholas Beach	0	0	14	2
SMB 5-1	Manhattan Beach at 40th Street	1	1	4	1
SMB 5-2	28th Street storm drain at Manhattan Beach	0	0	17	3
SMB 5-3	Manhattan Beach Pier, southern drain	1	1	5	1

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⁸ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the sub-drainage area to each beach monitoring location.

⁹ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

		Annual Allowable Exceedance Days of the Single Sample Objective (days)			
Station ID	Beach Monitoring Location	Winter Dry Weather (November 1 – March 31)		Wet Weather (November 1 – October 31)	
		Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
SMB 5-4	Hermosa City Beach at 26th St.	3	1	12	2
SMB 5-5	Hermosa Beach Pier	2	1	8	2
SMB 6-2	Redondo Municipal Pier- 100 yards south	3	1	14	2
SMB 6-5	Avenue I storm drain at Redondo Beach	3	1	6	1
SMB 6-6	Malaga Cove, Palos Verdes Estates	1	1	3	1
SMB 7-1	Malaga Cove, Palos Verdes Estates	1	1	14	2
SMB 7-2	Bluff Cove, Palos Verdes Estates	1	1	0	0
SMB 7-3	Long Point, Rancho Palos Verdes	1	1	5	1
SMB 7-4	Abalone Cove, Rancho Palos Verdes	0	0	1	1
SMB 7-5	Portuguese Bend Cove, Rancho Palos Verdes	1	1	2	1
SMB 7-6	White's Point, Royal Palms County Beach	1	1	6	1
SMB 7-8	Point Fermin/Wilder Annex, San Pedro	1	1	2	1
SMB 7-9	Outer Cabrillo Beach	1	1	3	1

R E V I S E D T E N T A T I V E

- d. Permittees shall comply with the following geometric mean receiving water limitations for all shoreline monitoring stations along Santa Monica Bay beaches during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

B. Santa Monica Bay Nearshore and Offshore Debris TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-2.

2. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged into water bodies within the Santa Monica Bay WMA and then into Santa Monica Bay or on the shoreline of Santa Monica Bay no later than March 20, 2020¹⁰, and every year thereafter.
3. Permittees shall comply with interim and final water quality-based effluent limitations for trash discharged into Santa Monica Bay or on the shoreline of Santa Monica Bay, per the schedule below:

Permittees	Baseline ¹¹	Mar 20, 2016	Mar 20, 2017	Mar 20, 2018	Mar 20, 2019	Mar 20, 2020 ¹²
		(80%)	(60%)	(40%)	(20%)	(0%)
Annual Trash Discharge (gals/yr)						
Agoura Hills ¹³	1,044	835	626	418	209	0
Calabasas ¹⁰	1,656	1,325	994	663	331	0
Culver City	52	42	31	21	10	0
El Segundo	2,732	2,186	1,639	1,093	546	0
Hermosa Beach	1,117	894	670	447	223	0
Los Angeles, City of	25,112	20,090	15,067	10,045	5,022	0
Los Angeles, County of	5,138	4,110	3,083	2,055	1,028	0
Malibu	5,809	4,648	3,486	2,324	1,162	0
Manhattan Beach	2,501	2,001	1,501	1,001	500	0
Palos Verdes Estates	3,346	2,677	2,007	1,338	669	0
Rancho Palos Verdes	7,254	5,803	4,353	2,902	1,451	0
Redondo Beach	3,197	2,558	1,918	1,279	639	0
Rolling Hills	515	412	309	206	103	0
Rolling Hills Estates	365	292	219	146	73	0
Santa Monica	5,672	4,537	3,403	2,269	1,134	0
Torrance	2,484	1,987	1,490	993	497	0
Westlake Village ¹⁰	3,131	2,505	1,879	1,252	626	0

4. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in B.2 and B.3 above per the provisions in Part VI.E.5.

C. Santa Monica Bay TMDL for DDTs and PCBs (USEPA established)

1. Permittees subject to the provisions below are identified in Attachment K, Table K-2.

¹⁰ If a Permittee by November 4, 2013, adopts local ordinances to ban plastic bags, smoking in public places and single use expanded polystyrene food packaging then the final compliance date will be extended until March 20, 2023.

¹¹ If a Permittee elects not to use the default baseline, then the Permittee shall include a plan to establish a site specific trash baseline in their Trash Monitoring and Reporting Plan.

¹² Permittees shall achieve their final effluent limitation of zero trash discharge for the 2019-2020 storm year and every year thereafter.

¹³ Permittees shall be deemed in compliance with the water quality-based effluent limitation for trash established to implement the Santa Monica Bay Nearshore and Offshore Debris TMDL, if the Permittee is in compliance with the water quality-based effluent limitations established to implement the Malibu Creek Watershed Trash TMDL.

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2. Permittees shall comply with the following WLAs, expressed as an annual loading of pollutants from the sediment discharged to Santa Monica Bay, per the provisions in Part IV.E.3:

Constituent	Annual Mass-Based WLA (g/yr)
DDT	27.08
PCBs	140.25

3. Compliance shall be determined based on a three-year averaging period.

D. TMDLs in the Malibu Creek Subwatershed

1. Malibu Creek and Lagoon Bacteria TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-2.

- b. Water Quality-Based Effluent Limitations

- i. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Malibu Lagoon during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

- ii. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Malibu Creek and its tributaries during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
E. coli	235/100 mL	126/100 mL

- c. Receiving Water Limitations

- i. Permittees shall comply with the following grouped¹⁴ final single sample bacteria receiving water limitations for Malibu Creek, its tributaries, and

¹⁴ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area to the receiving water.

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Malibu Lagoon during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
	Daily Sampling	Weekly Sampling
Summer Dry-Weather (April 1 to October 31)	0	0
Winter Dry-Weather (November 1 to March 31)	3	1
Wet Weather ¹⁵	17	3

- ii. Permittees shall comply with the following geometric mean receiving water limitations for discharges to Malibu Lagoon during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

- iii. Permittees shall comply with the following geometric mean receiving water limitation for discharges to Malibu Creek and its tributaries during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
E. coli	126/100 mL

2. Malibu Creek Watershed Trash TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-2.
- b. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Malibu Creek from Malibu Lagoon to Malibou Lake, Malibu Lagoon, Malibou Lake, Medea Creek, Lindero Creek, Lake Lindero, and Las Virgenes Creek in the Malibu Creek Watershed no later than July 7, 2017 and every year thereafter.
- c. Permittees shall comply with interim and final water quality-based effluent limitations for trash discharged to the Malibu Creek, per the schedule below:

¹⁵ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.
Attachment M –TMDLs in the Santa Monica Bay WMA

REVISITED TENTATIVE

Permittees	Baseline	July 7, 2013 (80%)	July 7, 2014 (60%)	July 7, 2015 (40%)	July 7, 2016 (20%)	July 7, 2017 (0%)
	Annual Trash Discharge (gals/yr)					
Agoura Hills	1810	1448	1086	724	362	0
Calabasas	673	539	404	269	135	0
Hidden Hills	71	57	43	28	14	0
Los Angeles County	1117	894	670	447	223	0
Malibu	226	181	136	91	45	0
Westlake Village	143	114	86	57	29	0

d. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in D.2.b and D.2.c above per the provisions in Part VI.E.5.

3. Malibu Creek Watershed Nutrients TMDL (*USEPA established*)

a. Permittees subject to the provisions below are identified in Attachment K, Table K-2.

b. Permittees shall comply with the following grouped¹⁶ WLAs per the provisions in Part VI.E.3 for discharges to Westlake Lake, Lake Lindero, Lindero Creek, Las Virgenes Creek, Medea Creek, Malibu Lake, Malibu Creek and Malibu Lagoon and its tributaries. Tributaries to Malibu Creek and Lagoon, include the following upstream water bodies; Triunfo Creek, Palo Comado Creek, Cheesebro Creek, Strokes Creek and Cold Creek.

Time Period	WLA	
	Nitrate as Nitrogen plus Nitrite as Nitrogen	Total Phosphorus
	Daily Maximum	Daily Maximum
Summer (April 15 to November 15) ¹⁷	8 lbs/day	0.8 lbs/day
Winter (November 16 to April 14)	8 mg/L	n/a

E. TMDLs in the Ballona Creek Subwatershed

1. Ballona Creek Trash TMDL

a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.

¹⁶ USEPA was unable to specifically distinguish the amounts of pollutant loads from allocation categories associated with areas regulated by the storm water permits. Therefore, allocations for storm water permits are grouped.

¹⁷ The mass-based summer WLAs are calculated as the sum of the allocations for “runoff from developed areas” and “dry weather urban runoff.”

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- b. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Ballona Creek no later than September 30, 2015 and every year thereafter.
- c. Permittees shall comply with the interim and final water quality-based effluent limitations for trash discharged to Ballona Creek, per the schedule below:

**Ballona Creek Subwatershed Trash Effluent Limitations per Storm Year¹⁸
(pounds of drip-dry trash)**

Permittees	Baseline	Sept 30, 2012 (20%)	Sept 30, 2013 (10%)	Sept 30, 2014 (3.3%)	Sept 30, 2015 ¹⁹ (0%)
		Annual Trash Discharge (pounds of trash)			
Beverly Hills	70,712	14,142	7,071	2,333	0
Culver City	37,271	7,454	3,727	1,230	0
Inglewood	22,324	4,465	2,232	737	0
Los Angeles, City of	942,720	188,544	94,272	31,110	0
Los Angeles, County of	52,693	10,539	5,269	1,739	0
Santa Monica	2,579	516	258	85	0
West Hollywood	13,411	2,682	1,341	443	0

**Ballona Creek Subwatershed Trash Effluent Limitations per Storm Year
(gallons of uncompressed trash)**

Permittees	Baseline	Sept 30, 2012 (20%)	Sept 30, 2013 (10%)	Sept 30, 2014 (3.3%)	Sept 30, 2015 ¹⁶ (0%)
		Annual Trash Discharge (gallons of uncompressed trash)			
Beverly Hills	45,336	9,067	4,534	1,496	0
Culver City	25,081	5,016	2,508	828	0
Inglewood	14,717	2,943	1,472	486	0
Los Angeles, City of	602,068	120,414	60,207	19,868	0
Los Angeles, County of	32,679	6,536	3,268	1,078	0
Santa Monica	1,749	350	175	58	0
West Hollywood	9,360	1,872	936	309	0

- ~~d. Seventy-two (72) hours after each rain event, Permittees shall clean out and measure trash retained.~~

¹⁸ For purposes of the provisions in this subpart, a storm year is defined as October 1 to September 30.

¹⁹ Permittees shall achieve their final water quality-based effluent limitation of zero trash discharged for the 2014-2015 storm year and every year thereafter.

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~~e. Every 3 months during dry weather, Permittees shall clean out and measure trash retained.~~

~~f.d.~~ Permittees shall comply with the interim and final water quality-based effluent limitations for trash in E.1.b and E.1.c above per the provisions in Part VI.E.5.

2. Ballona Creek Estuary Toxic Pollutants TMDL

a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.

b. Permittees shall comply with the following final water quality-based effluent limitations no later than January 11, 2021, expressed as an annual loading of sediment-bound pollutants deposited to Ballona Creek Estuary:

Constituent	Effluent Limitations	
	Annual	Units
Cadmium	8.0	kg/yr
Copper	227.3	kg/yr
Lead	312.3	kg/yr
Silver	6.69	kg/yr
Zinc	1003	kg/yr
Chlordane	3.34	g/yr
DDTs	10.56	g/yr
Total PCBs	152	g/yr
Total PAHs	26,900	g/yr

c. Permittees shall comply with interim and final water quality-based effluent limitations for sediment-bound pollutant loads deposited to Ballona Creek Estuary, per the schedule below:

Deadline	Total Drainage Area Served by the MS4 required to meet the water quality-based effluent limitations (%)
January 11, 2013	25
January 11, 2015	50
January 11, 2017	75
January 11, 2021	100

d. Permittees shall be deemed in compliance with the water quality-based effluent limitations in Part E.2.b by demonstrating any one of the following:

i. Final water quality-based effluent limitations for sediment-bound pollutants deposited to Ballona Creek Estuary are met; or

- ii. The sediment numeric targets as defined in the TMDL are met in bed sediments; or
 - iii. Concentrations of sediments discharged meet the numeric targets for sediment as defined in the TMDL.
3. Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL
- a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.
 - b. Water Quality-Based Effluent Limitations
 - i. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Ballona Creek Estuary; Ballona Creek Reach 2 at the confluence with Ballona Creek Estuary; and Centinela Creek at the confluence with Ballona Creek Estuary during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

- ii. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Sepulveda Channel during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
E. coli	235/100 mL	126/100 mL

- iii. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Ballona Creek Reach 2; Ballona Creek Reach 1 at the confluence with Ballona Creek Reach 2; and Benedict Canyon Channel at the confluence with Ballona Creek Reach 2 during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
E. coli	576/100 mL	126/100 mL

- iv. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Ballona Creek Reach 1 during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

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Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
Fecal coliform	4000/100 mL	2000/100 mL

c. Receiving Water Limitations

- i. Permittees shall comply with the following grouped²⁰ single sample bacteria receiving water limitations for Ballona Creek Estuary; Ballona Creek Reach 2 at the confluence with Ballona Creek Estuary; Centinela Creek at the confluence with Ballona Creek Estuary; Ballona Creek Reach 2; Ballona Creek Reach 1 at the confluence with Reach 2; Benedict Canyon Channel at the confluence with Ballona Creek Reach 2; and Sepulveda Channel:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective		Deadline
	Daily Sampling	Weekly Sampling	
Summer Dry-Weather (April 1 to October 31)	0	0	April 27, 2013
Winter Dry-Weather (November 1 to March 31)	3	1	April 27, 2013
Wet Weather ²¹	17*	3	July 15, 2021

* In Ballona Creek Reach 2 and at the confluence with Reach 2, the greater of the allowable exceedance days under the reference system approach or high flow suspension shall apply.

- ii. Permittees shall not exceed the single sample bacteria objective of 4000/100 ml in more than 10% of the samples collected from Ballona Creek Reach 1 during any 30-day period. Permittees shall achieve compliance with this receiving water limitation during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021.
- iii. Permittees shall comply with the following geometric mean receiving water limitations for discharges to Ballona Creek Estuary; Ballona Creek Reach 2 at the confluence with Ballona Creek Estuary; and Centinela Creek at the confluence with Ballona Creek Estuary during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

- iv. Permittees shall comply with the following geometric mean receiving water limitation for discharges to Ballona Creek Reach 2; Ballona Creek Reach 1 at the confluence with Ballona Creek Reach 2; Benedict Canyon Channel at the

²⁰ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

²¹ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

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confluence with Ballona Creek Reach 2; and Sepulveda Channel during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
E. coli	126/100 mL

- v. Permittees shall comply with the following geometric mean receiving water limitation for discharges to Ballona Creek Reach 1 during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Fecal coliform	2000/100 mL

4. Ballona Creek Metals TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.

b. Final Water Quality-Based Effluent Limitations

- i. Permittees shall comply with the following dry weather²² water quality-based effluent limitations no later than January 11, 2016, expressed as total recoverable metals discharged to Ballona Creek and Sepulveda Channel:

Constituent	Effluent Limitation Daily Maximum (g/day)	
	Ballona Creek	Sepulveda Channel
Copper	807.7	365.6
Lead	432.6	196.1
Selenium	169	76
Zinc	10,273.1	4,646.4

- ii. In lieu of calculating loads, Permittees may demonstrate compliance with the following concentration-based water quality-based effluent limitations during dry weather²³ no later than January 11, 2016, expressed as total recoverable metals discharged to Ballona Creek and Sepulveda Channel:

Constituent	Effluent Limitation Daily Maximum (µg/L)
Copper	24

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²² Dry weather is defined as any day when the maximum daily flow in Ballona Creek is less than 40 cubic feet per second (cfs) measured at Sawtelle Avenue.

²³ Ibid.

Lead	13
Selenium	5
Zinc	304

- iii. Permittees shall comply with the following wet weather²⁴ water quality-based effluent limitations no later than January 11, 2021, expressed as total recoverable metals discharged to Ballona Creek and its tributaries:

Constituent	Effluent Limitation Daily Maximum (g/day)
Copper	1.70×10^{-5} x daily storm volume (L)
Lead	5.58×10^{-5} x daily storm volume (L)
Selenium	4.73×10^{-6} x daily storm volume (L)
Zinc	1.13×10^{-4} x daily storm volume (L)

- c. Permittees shall comply with interim and final water quality-based effluent limitations for metals discharged to Ballona Creek and its tributaries, per the schedule below:

Deadline	Total Drainage Area Served by the MS4 required to meet the water quality-based effluent limitations (%)	
	Dry weather	Wet weather
January 11, 2012	50	25
January 11, 2014	75	--
January 11, 2016	100	50
January 11, 2021	100	100

5. Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation (*USEPA established*)

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.
- b. Permittees shall comply with the following grouped²⁵ WLA per the provisions in Part VI.E.3 for discharges of sediment into Ballona Creek Wetlands:

Constituent	Annual WLA ²⁶ (m ³ /yr)
Total Sediment (suspended sediment plus sediment bed)	44,615

²⁴ Wet weather is defined as any day when the maximum daily flow in Ballona Creek is equal to or greater than 40 cubic feet per second (cfs) measured at Sawtelle Avenue.

²⁵ The WLA is group-based and shared among all MS4 Permittees located within the drainage area.

²⁶ The WLA is applied as a 3-year average.

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F. TMDLs in Marina del Rey Subwatershed

1. Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.
- b. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Marina del Rey Harbor Beach and Back Basins D, E, and F during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

c. Receiving Water Limitations

- i. Permittees shall comply with the following grouped²⁷ final single sample bacteria receiving water limitations for all monitoring stations at Marina Beach and Basins D, E, and F, except for those monitoring stations subject to the antidegradation provisions, during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2021.

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
	Daily Sampling	Weekly Sampling
Summer Dry-Weather (April 1 to October 31)	0	0
Winter Dry-Weather (November 1 to March 31)	3	1
Wet Weather ²⁸	17	3

- ii. Permittees shall comply with the following grouped²⁹ final single sample bacteria receiving water limitations for monitoring stations in Marina del Rey subject to the antidegradation provision as of the effective date of this Order:

	Annual Allowable Exceedance Days of the Single Sample Objective (days)
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²⁷ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

²⁸ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

²⁹ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

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Station ID	Monitoring Location	Winter Dry Weather (November 1 – March 31)		Wet Weather (November 1 – October 31)	
		Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
MdRH-9	Basin F, center of basin	3	1	8	1

- iii. Permittees shall comply with the following geometric mean receiving water limitations for monitoring stations at Marina Beach and Basins D, E, and F during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

2. Marina del Rey Harbor Toxic Pollutants TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.
- b. Permittees shall comply with the following final water quality-based effluent limitations no later than March 22, 2016³⁰, expressed as an annual loading of pollutants associated with total suspended solids (TSS) discharged to Marina del Rey Harbor Back Basins D, E, and F:

Constituent	Effluent Limitations	
	Annual	Units
Copper	2.01	kg/yr
Lead	2.75	kg/yr
Zinc	8.85	kg/yr
Chlordane	0.0295	g/yr
Total PCBs	1.34	g/yr

- c. Permittees shall comply with interim and final water quality-based effluent limitations for pollutant loads associated with TSS discharged to Marina del Rey Harbor Back Basins D, E, and F, per the schedule below:

³⁰ If an Integrated Water Resources Approach is approved by the Regional Water Board and implemented then the Permittees shall comply with the final water quality-based effluent limitations no later than March 22, 2021.

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Deadline	Total Drainage Area Served by the MS4 required to meet the effluent limitations (%)
March 22, 2014	50
March 22, 2016	100

- d. If an approved Integrated Water Resources Approach is implemented, Permittees shall comply with interim and final water quality-based effluent limitations for pollutant loads associated with TSS discharged to Marina del Rey Harbor Back Basins D, E, and F, per the schedule below:

Deadline	Total Drainage Area Served by the MS4 required to meet the effluent limitations (%)
March 22, 2013	25
March 22, 2015	50
March 22, 2017	75
March 22, 2021	100

- e. Permittees shall be deemed in compliance with the water quality-based effluent limitations in Part F.2.b by demonstrating any one of the following:
- i. Final water quality-based effluent limitations for pollutants associated with TSS discharged to Marina del Rey Harbor Back Basins D, E, and F are met; or
 - ii. The sediment numeric targets as defined in the TMDL are met in bed sediments; or
 - iii. Pollutant concentrations associated with TSS discharged meet the numeric targets for sediment as defined in the TMDL.

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ATTACHMENT N. TMDLs IN DOMINGUEZ CHANNEL AND GREATER HARBOR WATERS WATERSHED MANAGEMENT AREA

A. Los Angeles Harbor Bacteria TMDL (Inner Cabrillo Beach and Main Ship Channel)

1. Permittees subject to the provisions below are identified in Attachment K, Table K-4.
2. Permittees shall comply with the following final water quality-based effluent limitations for discharges to the Los Angeles Harbor Main Ship Channel, Los Angeles and Long Beach Inner Harbor, and Inner Cabrillo Beach as of the effective date of this Order:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

3. Receiving Water Limitations

- a. Permittees shall comply with the following final single sample bacteria receiving water limitations for the Los Angeles Harbor Main Ship Channel and Inner Cabrillo Beach:

Time Period	Receiving Water	Compliance Monitoring Location	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
			Daily sampling	Weekly sampling
Summer Dry-Weather (April 1 to October 31)	Inner Cabrillo Beach	CB1 & CB2	0	0
	Main Ship Channel	HW07	0	0
Winter Dry-Weather (November 1 to March 31)	Inner Cabrillo Beach	CB1 & CB2	0	0
	Main Ship Channel	HW07	3	1
Wet Weather ³¹	Inner Cabrillo Beach	CB1 & CB2	0	0
	Main Ship Channel	HW07	15	3

- b. Permittees shall comply with the following geometric mean receiving water limitations for the Los Angeles Harbor Main Ship Channel, Los Angeles and Long Beach Inner Harbor, and Inner Cabrillo Beach at all times:

³¹ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.
Attachment N –TMDLs in the Dominguez Channel and Greater Harbor Waters WMA

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Constituent	Geometric Mean
Total coliform	1,000 MPN/100 mL
Fecal coliform	200 MPN/100 mL
Enterococcus	35 MPN/100 mL

B. Machado Lake Trash TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-4.
2. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Machado Lake no later than March 6, 2016, and every year thereafter.
3. Permittees shall comply with interim and final water quality-based effluent limitations for trash discharged to Machado Lake, per the schedule below:

**Machado Lake Trash Water Quality-Based Effluent Limitations
(gallons of uncompressed trash per year)**

Permittees	Baseline ³²	3/6/2012 (80%)	3/6/2013 (60%)	3/6/2014 (40%)	3/6/2015 (20%)	3/6/2016 ³³ (0%)
		Annual Trash Discharge (gallons/yr)				
Carson	8141	6513	4885	3257	1628	0
Lomita	9393	7514	5636	3757	1879	0
City of Los Angeles	12331	9865	7399	4932	2466	0
Los Angeles County	8304	6643	4982	3322	1661	0
Los Angeles County Flood Control District	16	13	10	7	3	0
Palos Verdes Estates	1976	1581	1186	791	395	0
Rancho Palos Verdes	5227	4181	3136	2091	1045	0
Redondo Beach	18	15	11	7	4	0
Rolling Hills	7004	5603	4202	2801	1401	0
Rolling Hills Estates	14722	11777	8833	5889	2944	0
Torrance	34809	27847	20885	13924	6962	0

4. If a Permittee opts to derive a site specific trash generation rate through its Trash Monitoring and Reporting Plan (TMRP), the baseline limitation will be calculated by multiplying the point source area(s) by the derived trash generation rate(s).

³² The Regional Water Board calculated the baseline water quality-based effluent limitations for the Permittees based on the estimated trash generation rate of 5334 gallons of uncompressed trash per square mile per year.

³³ Permittees shall achieve their final effluent limitation of zero trash discharge for the 2015-2016 storm year and every year thereafter.

5. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in B.2 and B.3 above per the provisions in Part VI.E.5.

C. Machado Lake Nutrient TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-4.
2. Permittees shall comply with the following interim and final water quality-based effluent limitations for discharges to Machado Lake:

Deadline	Interim and Final Effluent Limitations	
	Monthly Average Total Phosphorus (mg/L)	Monthly Average Total Nitrogen (TKN+NO ₃ -N+NO ₂ -N) (mg/L)
As of the effective date of this Order	1.25	3.5
March 11, 2014	1.25	2.45
September 11, 2018	0.10	1.0

3. Compliance Determination
 - a. Permittees may be deemed in compliance with the water quality-based effluent limitations by actively participating in a Lake Water Quality Management Plan (LWQMP) and attaining the receiving water limitations for Machado Lake. The City of Los Angeles has entered into a Memorandum of Agreement with the Regional Water Board to implement the LWQMP and reduce external nutrient loading to attain the following receiving water limitations:

Deadline	Interim and Final Receiving Water Limitations	
	Monthly Average Total Phosphorus (mg/L)	Monthly Average Total Nitrogen (TKN+NO ₃ -N+NO ₂ -N) (mg/L)
As of the effective date of this Order	1.25	3.5
March 11, 2014	1.25	2.45
September 11, 2018	0.10	1.0

- b. Permittees may be deemed in compliance with water quality-based effluent limitations by demonstrating reduction of total nitrogen and total phosphorous on an annual mass basis measured at the storm drain outfall of the Permittee's drainage area where approved by the Regional Water Board Executive Officer based on the results of a special study by the Permittee.³⁴
 - i. The County of Los Angeles submitted a special study work plan, which was approved by the Regional Water Board Executive Officer, and established the following annual mass-based water quality based effluent limitations:

Deadline	Interim and Final Effluent Limitations
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³⁴ The annual mass-based allocation shall be equivalent to a monthly average concentration of 0.1 mg/L total phosphorus and 1.0 mg/L total nitrogen based on approved flow conditions.

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	Annual Load Total Phosphorus (kg)	Annual Load Total Nitrogen (TKN+NO ₃ -N+NO ₂ -N) (kg)
March 11, 2014	887	1739
September 11, 2018	71	710

- ii. The City of Torrance submitted a special study work plan, which was approved by the Regional Water Board Executive Officer, and established the following annual mass-based water quality based effluent limitations:

Deadline	Interim and Final Effluent Limitations	
	Annual Load Total Phosphorus (kg)	Annual Load Total Nitrogen (TKN+NO ₃ -N+NO ₂ -N) (kg)
March 11, 2014	3,760	7,370
September 11, 2018	301	3008

D. Machado Lake Pesticides and PCBs TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-4.
2. Permittees shall comply with the following water quality-based effluent limitations for discharges of suspended sediments to Machado Lake, applied as a 3-year average no later than September 30, 2019:

Pollutant	Effluent Limitations for Suspended Sediment-Associated Contaminants (µg/kg dry weight)
Total PCBs	59.8
DDT (all congeners)	4.16
DDE (all congeners)	3.16
DDD (all congeners)	4.88
Total DDT	5.28
Chlordane	3.24
Dieldrin	1.9

E. Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Tables K-4 and K-13.
2. Permittees shall comply with the ~~following~~ interim water quality-based effluent limitations for ~~discharges to Dominguez Channel and Torrance Lateral~~ listed below, as of the effective date of this Order:
 - a. Permittees shall comply with the following interim water quality-based effluent limitations for discharges to Dominguez Channel freshwater during ~~W~~wet ~~W~~weather;

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- i. The freshwater toxicity interim water quality-based effluent limitation is 2 TUc. The freshwater interim effluent limitation shall be implemented as a trigger requiring initiation and implementation of the TRE/TIE process as outlined in US EPA’s “Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications Under the National Pollutant Discharge Elimination System Program” (2000).
- ii. Permittees shall comply with the following interim metals water quality-based effluent limitations for discharges to the Dominguez Channel freshwater and Torrance Lateral during wet weather:

Metals	Interim Effluent Limitation Daily Maximum (µg/L)
Total Copper	207.51
Total Lead	122.88
Total Zinc	898.87

- b. Permittees shall comply with the following interim concentration-based water quality-based effluent limitations for pollutant concentrations in the sediment discharged to the Dominguez Channel Estuary and Greater Los Angeles and Long Beach Harbor Waters:

Water Body	Interim Effluent Limitations Daily Maximum (mg/kg sediment)					
	Copper	Lead	Zinc	DDT	PAHs	PCBs
	Dominguez Channel Estuary (below Vermont Avenue)	220.0	510.0	789.0	1.727	31.60
Long Beach Inner Harbor	142.3	50.4	240.6	0.070	4.58	0.060
Los Angeles Inner Harbor	154.1	145.5	362.0	0.341	90.30	2.107
Long Beach Outer Harbor (inside breakwater)	67.3	46.7	150	0.075	4.022	0.248
Los Angeles Outer Harbor (inside breakwater)	104.1	46.7	150	0.097	4.022	0.310
Los Angeles River Estuary	53.0	46.7	183.5	0.254	4.36	0.683
San Pedro Bay Near/Off Shore Zones	76.9	66.6	263.1	0.057	4.022	0.193
Los Angeles Harbor - Cabrillo Marina	367.6	72.6	281.8	0.186	36.12	0.199
Los Angeles Harbor - Consolidated Slip	1470.0	1100.0	1705.0	1.724	386.00	1.920
Los Angeles Harbor - Inner Cabrillo Beach Area	129.7	46.7	163.1	0.145	4.022	0.033
Fish Harbor	558.6	116.5	430.5	40.5	2102.7	36.6

- 3. Permittees shall comply with the final water quality-based effluent limitations as listed below no later than March 23, 2032, and every year thereafter:
 - a. Dominguez Channel Freshwater – Wet Weather
 - i. Freshwater Toxicity Effluent Limitation shall not exceed the monthly median of 1 TUc.

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- ii. Permittees shall comply with the following final metals water quality-based effluent limitations for discharges to Dominguez Channel and all upstream reaches and tributaries of Dominguez Channel above Vermont Avenue:

Metals	Water Column Mass-Based Final Effluent Limitation Daily Maximum ³⁵ (g/day)
Total Copper	1,300.3
Total Lead	5,733.7
Total Zinc	9,355.5

b. Torrance Lateral Freshwater and Sediment – Wet Weather

- i. Permittees shall comply with the following final metals water quality-based effluent limitations for discharges to the Torrance Lateral:

Metals	Water Column Effluent Limitation Daily Maximum ³⁶ (unfiltered, µg/L)
Total Copper	9.7
Total Lead	42.7
Total Zinc	69.7

- ii. Permittees shall comply with the following final concentration-based water quality-based effluent limitations for pollutant concentrations in the sediment discharged to the Torrance Lateral:

Metals	Concentration-Based Effluent Limitation Daily Maximum (mg/kg dry)
Total Copper	31.6
Total Lead	35.8
Total Zinc	121

c. Dominguez Channel Estuary and Greater Los Angeles and Long Beach Harbor Waters

- i. Permittees shall comply with the following final mass-based water quality-based effluent limitations, expressed as an annual loading of pollutants in the sediment deposited to Dominguez Channel Estuary, Los Angeles River Estuary, and the Greater Los Angeles and Long Beach Harbor Waters:

³⁵ Effluent limitations are based on a hardness of 50 mg/L, and 90th percentile of annual flow rates (62.7 cfs) in Dominguez Channel. Recalculated mass-based effluent limitations using ambient hardness and flow rate at the time of sampling are consistent with the assumptions and requirements of the TMDL. In addition to the effluent limitations above, samples collected during flow conditions less than the 90th percentile of annual flow rates must demonstrate that the acute and chronic hardness dependent water quality criteria provided in the California Toxics Rule (CTR) are achieved.

³⁶ Effluent limitations are based on a hardness of 50 mg/L. Recalculated concentration-based effluent limitations using ambient hardness at the time of sampling are consistent with the assumptions and requirements of the TMDL. In addition to the effluent limitations above, samples collected during flow conditions less than the 90th percentile of annual flow rates must demonstrate that the acute and chronic hardness dependent water quality criteria provided in the CTR are achieved.

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Water Body	Final Effluent Limitations Annual (kg/yr)			
	Total Cu	Total Pb	Total Zn	Total PAHs
Dominguez Channel Estuary	22.4	54.2	271.8	0.134
Consolidated Slip	2.73	3.63	28.7	0.0058
Inner Harbor	1.7	34.0	115.9	0.088
Outer Harbor	0.91	26.1	81.5	0.105
Fish Harbor (POLA)	0.00017	0.54	1.62	0.007
Cabrillo Marina (POLA)	0.0196	0.289	0.74	0.00016
San Pedro Bay	20.3	54.7	213.1	1.76
LA River Estuary	35.3	65.7	242.0	2.31

- ii. Permittees shall comply with the following final concentration-based water quality-based effluent limitations for pollutant concentrations in the sediments discharged to the Dominguez Channel Estuary, Consolidated Slip, and Fish Harbor:

Water Body	Effluent Limitations Daily Maximum (mg/kg dry sediment)		
	Cadmium	Chromium	Mercury
Dominguez Channel Estuary	1.2	--	--
Consolidated Slip	1.2	81	0.15
Fish Harbor	--	--	0.15

- d. Permittees shall comply with the following final mass-based water quality-based effluent limitations, expressed as an annual loading of total DDT and total PCBs in the sediment deposited to Dominguez Channel Estuary, Los Angeles River Estuary, and the Greater Los Angeles and Long Beach Harbor Waters:

Water Body	Final Effluent Limitations Annual (g/yr)	
	DDT total	PCBs total
Dominguez Channel Estuary	0.250	0.207
Consolidated Slip	0.009	0.004
Inner Harbor	0.051	0.059
Outer Harbor	0.005	0.020
Fish Harbor	0.0003	0.0019
Cabrillo Marina	0.000028	0.000025
Inner Cabrillo Beach	0.0001	0.0003
San Pedro Bay	0.049	0.44
LA River Estuary	0.100	0.324

4. Compliance Determination

- a. Permittees shall be deemed in compliance with the interim concentration-based water quality-based effluent limitations for pollutant concentrations in the Attachment N –TMDLs in the Dominguez Channel and Greater Harbor Waters WMA

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sediment as listed above in part E.2.b by meeting any one of the following methods:

- i. Demonstrate that the sediment quality condition of *Unimpacted* or *Likely Unimpacted* via the interpretation and integration of multiple lines of evidence as defined in the Sediment Quality Objectives (SQO) Part 1, is met; or
 - ii. Meet the interim water quality-based effluent limitations in bed sediment over a three-year averaging period; or
 - iii. Meet the interim water quality-based effluent limitations in the discharge over a three-year averaging period.
- b.** Permittees shall be deemed in compliance with the final fresh water metals water quality-based effluent limitations for discharges to Dominguez Channel and Torrance Lateral as listed above in parts E.3.a.ii and E.3.b.i by meeting any one of the following methods:
- i. Final metals water quality-based effluent limitations are met; or
 - ii. CTR total metals criteria are met instream; or
 - iii. CTR total metals criteria are met in the discharge.
- c.** Permittees shall be deemed in compliance with the final water quality-based effluent limitations for pollutants in the sediment as listed above in parts E.3.c.i and E.3.c.ii by meeting any one of the following methods:
- i. Final water quality-based effluent limitations for pollutants in the sediment are met; or
 - ii. The qualitative sediment condition of *Unimpacted* or *Likely Unimpacted* via the interpretation and integration of multiple lines of evidence as defined in the SQO Part 1, is met, with the exception of chromium, which is not included in the SQO Part 1; or
 - iii. Sediment numeric targets are met in bed sediments over a three-year averaging period.
- d.** Permittees shall be deemed in compliance with the final water quality-based effluent limitations for total DDT and total PCBs in the sediment as listed above in part E.3.d by meeting any one of the following methods:
- i. Fish tissue targets are met in species resident to the specified water bodies³⁷; or
 - ii. Final water quality-based effluent limitations for pollutants in the sediment are met; or
 - iii. Sediment numeric targets to protect fish tissue are met in bed sediments over a three-year averaging period; or

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³⁷ A site-specific study to determine resident species shall be submitted to the Regional Water Board Executive Officer for approval.

- iv.** Demonstrate that the sediment quality condition protective of fish tissue is achieved per the State Water Board's Statewide Enclosed Bays and Estuaries Plan.

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ATTACHMENT O. TMDLs IN LOS ANGELES RIVER WATERSHED MANAGEMENT AREA**A. Los Angeles River Watershed Trash TMDL**

1. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
2. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to the Los Angeles River no later than September 30, 2016 and every year thereafter.
3. Permittees shall comply with interim and final water quality-based effluent limitations for trash discharged to the Los Angeles River, per the schedule below:

**Los Angeles River Watershed Trash Effluent Limitations³⁸ per Storm Year³⁹
(gallons of uncompressed trash)**

Permittees	<u>Baseline</u>	2012 (30%)	2013 (20%)	2014 (10%)	2015 (3.3%)	2016⁴⁰ (0%)
Alhambra	39903	11971	7981	3990	1317	0
Arcadia	50108	15032	10022	5011	1654	0
Bell	16026	4808	3205	1603	529	0
Bell Gardens	13500	4050	2700	1350	446	0
Bradbury	4277	1283	855	428	141	0
Burbank	92590	27777	18518	9259	3055	0
Calabasas	22505	6752	4501	2251	743	0
Carson	6832	2050	1366	683	225	0
Commerce	58733	17620	11747	5873	1938	0
Compton	53191	15957	10638	5319	1755	0
Cudahy	5935	1781	1187	594	196	0
Downey	39063	11719	7813	3906	1289	0
Duarte	12210	3663	2442	1221	403	0
El Monte	42208	12662	8442	4221	1393	0
Glendale	140314	42094	28063	14031	4630	0
Hidden Hills	3663	1099	733	366	121	0
Huntington Park	19159	5748	3832	1916	632	0
Irwindale	12352	3706	2470	1235	408	0
La Cañada Flintridge	33496	10049	6699	3350	1105	0
Los Angeles	1374845	412454	274969	137485	45370	0
Los Angeles County	310223	93067	62045	31022	10237	0
Lynwood	28201	8460	5640	2820	931	0
Maywood	6129	1839	1226	613	202	0
Monrovia	46687	14006	9337	4669	1541	0
Montebello	50369	15111	10074	5037	1662	0
Monterey Park	38899	11670	7780	3890	1284	0
Paramount	27452	8236	5490	2745	906	0
Pasadena	111998	33599	22400	11200	3696	0
Pico Rivera	13953	4186	2791	1395	460	0
Rosemead	27305	8192	5461	2731	901	0
San Fernando	13947	4184	2789	1395	460	0
San Gabriel	20343	6103	4069	2034	671	0

³⁸ Effluent limitations are expressed as allowable trash discharge relative to baseline Waste Load Allocations specified in Table 7-2.2 of the Basin Plan.

³⁹ Storm year is defined as October 1 to September 30 herein.

⁴⁰ Permittees shall achieve their final effluent limitation of zero trash discharge for the 2015-2016 storm year and every year thereafter.

Permittees	Baseline	2012 (30%)	2013 (20%)	2014 (10%)	2015 (3.3%)	2016 ⁴⁰ (0%)
San Marino	14391	4317	2878	1439	475	0
Santa Clarita	901	270	180	90	30	0
Sierra Madre	11611	3483	2322	1161	383	0
Signal Hill	9434	2830	1887	943	311	0
Simi Valley	137	41	27	14	5	0
South El Monte	15999	4800	3200	1600	528	0
South Gate	43904	13171	8781	4390	1449	0
South Pasadena	14907	4472	2981	1491	492	0
Temple City	17572	5272	3514	1757	580	0
Vernon	47203	14161	9441	4720	1558	0

Los Angeles River Watershed Trash Effluent Limitations⁴¹ per Storm Year⁴²
(pounds of drip-dry trash)

Permittees	Baseline	2012 (30%)	2013 (20%)	2014 (10%)	2015 (3.3%)	2016 ⁴³ (0%)
Alhambra	68761	20628	13752	6876	2269	0
Arcadia	93036	27911	18607	9304	3070	0
Bell	25337	7601	5067	2534	836	0
Bell Gardens	23371	7011	4674	2337	771	0
Bradbury	12160	3648	2432	1216	401	0
Burbank	170389	51117	34078	17039	5623	0
Calabasas	52230	15669	10446	5223	1724	0
Carson	10208	3062	2042	1021	337	0
Commerce	85481	25644	17096	8548	2821	0
Compton	86356	25907	17271	8636	2850	0
Cudahy	10061	3018	2012	1006	332	0
Downey	68507	20552	13701	6851	2261	0
Duarte	23687	7106	4737	2369	782	0
El Monte	68267	20480	13653	6827	2253	0
Glendale	293498	88049	58700	29350	9685	0
Hidden Hills	10821	3246	2164	1082	357	0
Huntington Park	30929	9279	6186	3093	1021	0
Irwindale	17911	5373	3582	1791	591	0
La Cañada Flintridge	73747	22124	14749	7375	2434	0
Los Angeles	2572500	771750	514500	257250	84893	0
Los Angeles County	651806	195542	130361	65181	21510	0
Lynwood	46467	13940	9293	4647	1533	0
Maywood	10549	3165	2110	1055	348	0
Monrovia	100988	30296	20198	10099	3333	0
Montebello	83707	25112	16741	8371	2762	0
Monterey Park	70456	21137	14091	7046	2325	0
Paramount	44490	13347	8898	4449	1468	0
Pasadena	207514	62254	41503	20751	6848	0
Pico Rivera	22549	6765	4510	2255	744	0
Rosemead	47378	14213	9476	4738	1563	0
San Fernando	23077	6923	4615	2308	762	0

⁴¹ Effluent limitations are expressed as allowable trash discharge relative to baseline Waste Load Allocations specified in Table 7-2.2 of the Basin Plan.

⁴² Storm year is defined as October 1 to September 30 herein.

⁴³ Permittees shall achieve their final effluent limitation of zero trash discharge for the 2015-2016 storm year and every year thereafter.

Permittees	Baseline	2012 (30%)	2013 (20%)	2014 (10%)	2015 (3.3%)	2016 ⁴³ (0%)
San Gabriel	36437	10931	7287	3644	1202	0
San Marino	29147	8744	5829	2915	962	0
Santa Clarita	2326	698	465	233	77	0
Sierra Madre	25192	7558	5038	2519	831	0
Signal Hill	14220	4266	2844	1422	469	0
Simi Valley	344	103	69	34	11	0
South El Monte	24319	7296	4864	2432	803	0
South Gate	72333	21700	14467	7233	2387	0
South Pasadena	28357	8507	5671	2836	936	0
Temple City	31819	9546	6364	3182	1050	0
Vernon	66814	20044	13363	6681	2205	0

- Permittees shall comply with the interim and final water quality-based effluent limitations for trash in A.2 and A.3 above per the provisions in Part VI.E.5.

B. Los Angeles River Nitrogen Compounds and Related Effects TMDL

- Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

Water Body	NH ₃ -N (mg/L)		NO ₃ -N (mg/L)	NO ₂ -N (mg/L)	NO ₃ -N+NO ₂ -N (mg/L)
	One-hour Average	Thirty-day Average	Thirty-day Average	Thirty-day Average	Thirty-day Average
Los Angeles River above Los Angeles-Glendale WRP (LAG)	4.7	1.6	8.0	1.0	8.0
Los Angeles River below LAG	8.7	2.4	8.0	1.0	8.0
Los Angeles Tributaries	10.1	2.3	8.0	1.0	8.0

C. Los Angeles River and Tributaries Metals TMDL

- Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- Final Water Quality-Based Effluent Limitations
 - The watershed is divided into five jurisdictional groups based on the subwatersheds of the tributaries that drain to each reach of the river. Each jurisdictional group shall achieve compliance in prescribed percentages of its subwatershed(s). Jurisdictional groups can be reorganized or subdivided upon approval by the Regional Water Board Executive Officer.
 - Permittees shall comply with the following grouped⁴⁴ dry weather⁴⁵ water quality-based effluent limitations no later than January 11, 2024, expressed as total recoverable metals.⁴⁶

⁴⁴ The dry weather water quality-based effluent limitations are grouped-based and shared by the MS4 Permittees that are located within the drainage area.

⁴⁵ Dry weather is defined as any day when the maximum daily flow in the Los Angeles River is less than 500 cfs measured at the Wardlow gage station.

⁴⁶ Dry weather effluent limitations are equal to storm drain flows (critical flows minus median POTW flows minus median open space flows) multiplied by reach specific numeric targets, minus the contribution from direct air deposition.

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Waterbody	Effluent Limitations Daily Maximum (kg/day)		
	Copper	Lead	Zinc
LA River Reach 6	WER ¹ x 0.53	WER ¹ x 0.33	---
LA River Reach 5	WER ¹ x 0.05	WER ¹ x 0.03	---
LA River Reach 4	WER ¹ x 0.32	WER ¹ x 0.12	---
LA River Reach 3	WER ¹ x 0.06	WER ¹ x 0.03	---
LA River Reach 2	WER ¹ x 0.13	WER ¹ x 0.07	---
LA River Reach 1	WER ¹ x 0.14	WER ¹ x 0.07	---
Bell Creek	WER ¹ x 0.06	WER ¹ x 0.04	---
Tujunga Wash	WER ¹ x 0.001	WER ¹ x 0.0002	---
Burbank Channel	WER ¹ x 0.15	WER ¹ x 0.07	---
Verdugo Wash	WER ¹ x 0.18	WER ¹ x 0.10	---
Arroyo Seco	WER ¹ x 0.01	WER ¹ x 0.01	---
Rio Hondo Reach 1	WER ¹ x 0.01	WER ¹ x 0.006	WER ¹ x 0.16
Compton Creek	WER ¹ x 0.04	WER ¹ x 0.02	---

¹WER(s) have a default value of 1.0 unless site-specific WER(s) are approved via the Basin Plan Amendment process.

- c. In lieu of calculating loads, Permittees may demonstrate compliance with the following concentration-based water quality-based effluent limitations during dry weather no later than January 11, 2024, expressed as total recoverable metals:

Waterbody	Effluent Limitations Daily Maximum (µg total recoverable metals/L)		
	Copper	Lead	Zinc
LA River Reach 5, 6 and Bell Creek	WER ¹ x 30	WER ¹ x 19	---
LA River Reach 4	WER ¹ x 26	WER ¹ x 10	---
LA River Reach 3 above LA-Glendale WRP and Verdugo Wash	WER ¹ x 23	WER ¹ x 12	---
LA River Reach 3 below LA-Glendale WRP	WER ¹ x 26	WER ¹ x 12	---
Burbank Western Channel (above WRP)	WER ¹ x 26	WER ¹ x 14	---
Burbank Western Channel (below WRP)	WER ¹ x 19	WER ¹ x 9.1	---
LA River Reach 2 and Arroyo Seco	WER ¹ x 22	WER ¹ x 11	---
LA River Reach 1	WER ¹ x 23	WER ¹ x 12	---
Compton Creek	WER ¹ x 19	WER ¹ x 8.9	---
Rio Hondo Reach 1	WER ¹ x 13	WER ¹ x 5.0	WER ¹ x 131

¹WER(s) have a default value of 1.0 unless site-specific WER(s) are approved via the Basin Plan Amendment process.

- d. Permittees shall comply with the following grouped⁴⁷ wet weather⁴⁸ water quality-based effluent limitations no later than January 11, 2028, expressed as total recoverable metals discharged to all reaches of the Los Angeles River and its tributaries.

Constituent	Effluent Limitation Daily Maximum (kg/day)
Cadmium	$WER^1 \times 2.8 \times 10^{-9} \times \text{daily volume (L)} - 1.8$
Copper	$WER^1 \times 1.5 \times 10^{-8} \times \text{daily volume (L)} - 9.5$
Lead	$WER^1 \times 5.6 \times 10^{-8} \times \text{daily volume (L)} - 3.85$
Zinc	$WER^1 \times 1.4 \times 10^{-7} \times \text{daily volume (L)} - 83$

¹ WER(s) have a default value of 1.0 unless site-specific WER(s) are approved via the Basin Plan Amendment process.

- 3. Permittees shall comply with interim and final water quality-based effluent limitations for metals discharged to the Los Angeles River and its tributaries, per the schedule below:

Deadline	Total Drainage Area Served by the MS4 required to meet the water quality-based effluent limitations (%)	
	Dry weather	Wet weather
January 11, 2012	50	25
January 11, 2020	75	--
January 11, 2024	100	50
January 11, 2028	100	100

D. Los Angeles River Watershed Bacteria TMDL

- 1. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- 2. Permittees shall comply with the following final water quality-based effluent limitations for discharges to the Los Angeles River and its tributaries during dry weather according to the schedule in Table O-1, and during wet weather no later than March 23, 2037:

⁴⁷ The wet weather water quality-based effluent limitations are grouped-based and shared among all MS4 Permittees located within the drainage area.

⁴⁸ Wet weather is defined as any day when the maximum daily flow in the Los Angeles River is equal to or greater than 500 cfs measured at the Wardlow gage station.

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Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
<i>E. coli</i>	235/100 mL	126/100 mL

3. Permittees shall comply with the following grouped⁴⁹ interim dry weather single sample bacteria water quality-based effluent limitations for specific river segments and tributaries as listed in the table, below, according to the schedule in Table O-1:

River Segment or Tributary	Daily Maximum <i>E. coli</i> Load (10 ⁹ MPN/Day)
Los Angeles River Segment A (Willow to Rosecrans)	301
Los Angeles River Segment B (Rosecrans to Figueroa)	518
Los Angeles River Segment C (Figueroa to Tujunga)	463
Los Angeles River Segment D (Tujunga to Balboa)	454
Los Angeles River Segment E (Balboa to headwaters)	32
Aliso Canyon Wash	23
Arroyo Seco	24
Bell Creek	14
Bull Creek	9
Burbank Western Channel	86
Compton Creek	7
Dry Canyon	7
McCoy Canyon	7
Rio Hondo	2
Tujunga Wash	10
Verdugo Wash	51

- a. Unexpectedly high-loading outfalls may be excluded from interim compliance calculations under the following circumstances: If an outfall which was 1) loading *E. coli* at a rate less than the 25th percentile of outfalls during the monitoring events used to develop the “MS4 Load Reduction Strategy” (LRS), but, at the time of compliance monitoring, is 2) loading *E. coli* at a rate greater than the 90th percentile of outfalls, and 3) actions are taken prior to the end of the first phase (i.e. 10 years after the beginning of the segment or tributary specific phase) such that the outfall is returned to a loading less than the 50th percentile of the outfalls

⁴⁹ The interim dry weather water quality-based effluent limitations are group-based and shared among all MS4 Permittees located within the drainage area. However, the interim dry weather water quality-based effluent limitations may be distributed based on proportional drainage area, upon approval of the Regional Water Board Executive Officer.

at compliance monitoring, then the 90th percentile data from the outfall can be excluded from the compliance loading calculations.

- b. Likewise, if an outfall which was 1) the subject of a dry weather diversion is found, at the time of compliance monitoring, to be 2) contributing greater than the 90th percentile loading rate, and 3) actions are taken such that the outfall is returned to a loading less than the 50th percentile of the outfalls at compliance monitoring, and a maintenance schedule for the diversion is submitted with the compliance report, then the 90th percentile data from the outfall can be excluded from the compliance loading calculations.

4. Receiving Water Limitations

- a. Permittees shall comply with the following grouped⁵⁰ final single sample bacteria receiving water limitations for discharges to the Los Angeles River and its tributaries during dry weather according to the schedule in Table O-1, and during wet weather no later than March 23, 2037:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
	Daily Sampling	Weekly Sampling
Dry Weather	5	1
Non-HFS ⁵¹ Waterbodies Wet Weather	15	2
HFS Waterbodies Wet Weather	10 (not including HSF days)	2 (not including HSF days)

- b. Permittees shall comply with the following geometric mean receiving water limitation for discharges to the Los Angeles River and its tributaries during dry weather according to the schedule in Table O-1, and during wet weather no later than March 23, 2037:

Constituent	Geometric Mean (MPN or cfu)
E. coli	126/100 mL

Table O-1. Los Angeles River Bacteria Implementation Schedule for Dry Weather

Italics in this Table refer to Permittees using an alternative compliance plan instead of an LRS.

Implementation Action	Responsible Parties	Deadline
SEGMENT B (upper and middle Reach 2 – Figueroa Street to Rosecrans Avenue)		
First phase – Segment B		
Submit a Load Reduction Strategy (LRS) for Segment B (<i>or submit an alternative compliance plan</i>)	MS4 Permittees discharging to Segment B	September 23, 2014

⁵⁰ The final receiving water limitations are group-based and shared among all MS4 Permittees, which includes LA MS4, Long Beach MS4, and Caltrans.

⁵¹ HFS stands for high flow suspension as defined in Chapter 2 of the Basin Plan.

Implementation Action	Responsible Parties	Deadline
Complete implementation of LRS	MS4 Permittees discharging to Segment B, if using LRS	March 23, 2019
Achieve interim (or final) water quality-based effluent limitations and submit report to Regional Water Board	MS4 Permittees discharging to Segment B, if using LRS	March 23, 2022
<i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board</i>	<i>MS4 Permittees discharging to Segment B, if using alternative compliance plan</i>	<i>March 23, 2022</i>
Second phase, if necessary – Segment B for LRS approach only		
Submit a new LRS	MS4 Permittees discharging to Segment B	March 23, 2023
Complete implementation of LRS	MS4 Permittees discharging to Segment B, if using LRS	September 23, 2026
Achieve final water quality-based effluent limitations in Segment B or demonstrate that non-compliance is only due to upstream contributions and submit report to Regional Water Board	MS4 Permittees discharging to Segment B, if using LRS	September 23, 2028
SEGMENT B TRIBUTARIES (Rio Hondo and Arroyo Seco)		
First phase – Segment B Tributaries (Rio Hondo and Arroyo Seco)		
Submit a Load Reduction Strategy (LRS) for Segment B tributaries (<i>or submit an alternative compliance plan</i>)	MS4 Permittees discharging to Segment B tributaries	March 23, 2016
Complete implementation of LRS	MS4 Permittees discharging to Segment B tributaries, if using LRS	September 23, 2020
Achieve interim (or final) water quality-based effluent limitations and submit report to Regional Water Board	MS4 Permittees discharging to Segment B tributaries, if using LRS	September 23, 2023
<i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is only due to upstream contributions and submit report to Regional Water Board</i>	<i>MS4 Permittees discharging to Segment B tributaries, if using alternative compliance plan</i>	<i>September 23, 2023</i>
Second phase, if necessary – Segment B Tributaries (Rio Hondo and Arroyo Seco) for LRS approach only		
Submit a new LRS	MS4 Permittees discharging to Segment B tributaries	September 23, 2024

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Implementation Action	Responsible Parties	Deadline
Complete implementation of LRS	MS4 Permittees discharging to Segment B tributaries, if using LRS	March 23, 2028
Achieve final water quality-based effluent limitations Segment B tributaries or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board	MS4 Permittees discharging to Segment B tributaries, if using LRS	March 23, 2030
SEGMENT A (lower Reach 2 and Reach 1 – Rosecrans Avenue to Willow Street)		
First phase – Segment A		
Submit a Load Reduction Strategy (LRS) for Segment A (or submit an alternative compliance plan)	MS4 Permittees discharging to Segment A	September 23, 2016
Complete implementation of LRS	MS4 Permittees discharging to Segment A, if using LRS	March 23, 2021
Achieve interim (or final) water quality-based effluent limitations and submit report to Regional Water Board	MS4 Permittees discharging to Segment A, if using LRS	March 23, 2024
<i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board</i>	<i>MS4 Permittees discharging to Segment A, if using alternative compliance plan</i>	<i>March 23, 2024</i>
Second phase, if necessary – Segment A for LRS approach only		
Submit a new LRS	MS4 Permittees discharging to Segment A	March 23, 2025
Complete implementation of LRS	MS4 Permittees discharging to Segment A, if using LRS	September 23, 2029
Achieve final water quality-based effluent limitations in Segment A or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board	MS4 Permittees discharging to Segment A, if using LRS	September 23, 2031
SEGMENT A TRIBUTARY (Compton Creek)		
First phase – Segment A Tributary		
Submit a Load Reduction Strategy (LRS) for Segment A tributary (or submit an alternative compliance plan)	MS4 Permittees discharging to Segment A tributary	March 23, 2018
Complete implementation of LRS	MS4 Permittees discharging to Segment A tributary if using LRS	September 23, 2022

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Implementation Action	Responsible Parties	Deadline
Achieve interim (or final) water quality-based effluent limitations and submit report to Regional Water Board	MS4 Permittees discharging to Segment A tributary if using LRS	September 23, 2025
<i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board</i>	<i>MS4 Permittees discharging to Segment A tributary, if using alternative compliance plan</i>	<i>September 23, 2025</i>
Second phase, if necessary – Segment A Tributary for LRS approach only		
Submit a new LRS	MS4 Permittees discharging to Segment A tributary	September 23, 2026
Complete implementation of LRS	MS4 Permittees discharging to Segment A tributary, if using LRS	March 23, 2030
Achieve final water quality-based effluent limitations in Segment A tributary or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board	MS4 Permittees discharging to Segment A tributary, if using LRS	March 23, 2032
SEGMENT E (Reach 6 – LA River headwaters [confluence with Bell Creek and Calabasas Creek] to Balboa Boulevard)		
First phase – Segment E		
Submit a Load Reduction Strategy (LRS) for Segment E (<i>or submit an alternative compliance plan</i>)	MS4 Permittees discharging to Segment E	September 23, 2017
Complete implementation of LRS	MS4 Permittees discharging to Segment E, if using LRS	March 23, 2022
Achieve interim (or final) water quality-based effluent limitations and submit report to Regional Water Board	MS4 Permittees discharging to Segment E, if using LRS	March 23, 2025
<i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board</i>	<i>MS4 Permittees discharging to Segment E, if using alternative compliance plan</i>	<i>March 23, 2025</i>
Second phase, if necessary –Segment E for LRS approach only		
Submit a new LRS	MS4 Permittees discharging to Segment E	March 23, 2026
Complete implementation of LRS	MS4 Permittees discharging to Segment E, if using LRS	September 23, 2029

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Implementation Action	Responsible Parties	Deadline
Achieve final Water quality-based effluent limitations in Segment E or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board	MS4 Permittees discharging to Segment E, if using LRS	September 23, 2031
SEGMENT E TRIBUTARIES (Dry Canyon Creek, McCoy Creek, Bell Creek, and Aliso Canyon Wash)		
First phase – Segment E Tributaries		
Submit a Load Reduction Strategy (LRS) for Segment E tributaries (or submit an alternative compliance plan)	MS4 Permittees discharging to Segment E tributaries	September 23, 2021
Complete implementation of LRS	MS4 Permittees discharging to Segment E tributaries if using LRS	March 23, 2026
Achieve interim (or final) water quality-based effluent limitations and submit report to Regional Water Board	MS4 Permittees discharging to Segment E tributaries, if using LRS	March 23, 2029
<i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board</i>	<i>MS4 Permittees discharging to Segment E tributaries, if using alternative compliance plan</i>	<i>March 23, 2029</i>
Second phase, if necessary – Segment E Tributaries for LRS approach only		
Submit a new LRS	MS4 Permittees discharging to Segment E tributaries	March 23, 2030
Complete implementation of LRS	MS4 Permittees discharging to Segment E tributaries, if using LRS	September 23, 2033
Achieve final water quality-based effluent limitations in Segment E tributaries or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board	MS4 Permittees discharging to Segment E tributaries, if using LRS	September 23, 2035
SEGMENT C (lower Reach 4 and Reach 3 – Tujunga Avenue to Figueroa Street) SEGMENT C TRIBUTARIES (Tujunga Wash, Burbank Western Channel, and Verdugo Wash) SEGMENT D (Reach 5 and upper Reach 4 – Balboa Boulevard to Tujunga Avenue) SEGMENT D TRIBUTARIES (Bull Creek)		
First phase – Segment C, Segment C Tributaries, Segment D, Segment D tributaries		
Submit a Load Reduction Strategies (LRS) for Segment C, Segment C tributaries, Segment D, Segment D tributaries (or submit an alternative compliance plan)	MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries	March 23, 2023

Implementation Action	Responsible Parties	Deadline
Complete implementation of LRS	MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries, if using LRS	September 23, 2027
Achieve interim (or final) water quality-based effluent limitations and submit report to Regional Water Board	MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries, if using LRS	September 23, 2030
<i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board</i>	<i>MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries, if using alternative compliance plan</i>	<i>September 23, 2030</i>
Second phase, if necessary - Segment C, Segment C Tributaries, Segment D, Segment D Tributaries for LRS approach only		
Submit a new LRS	MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries	September 23, 2031
Complete implementation of LRS	MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries if using LRS	March 23, 2035
Achieve final water quality-based effluent limitations in Segment C, Segment C tributaries, Segment D, Segment D tributaries or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board	MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries if using LRS	March 23, 2037

5. Compliance

- a. Permittees may demonstrate compliance with the final dry weather limitations by demonstrating that final receiving water limitations are met in the receiving waters or by demonstrating one of the following conditions at outfalls to the receiving waters:
 - i. Flow-weighted concentration of *E. coli* in MS4 discharges during dry weather is less than or equal to 235 MPN/100mL, based on a weighted-average using flow rates from all measured outfalls; or
 - ii. Zero discharge during dry weather.
- b. In addition, individual Permittees or subgroups of Permittees may differentiate their dry weather discharges from other dischargers or upstream contributions by demonstrating one of the following conditions at outfalls to the receiving waters or at segment, tributary or jurisdictional boundaries:

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- i. The flow-weighted concentration of E. coli in a Permittee’s individual discharge or in a group of Permittees’ collective discharge during dry weather is less than or equal to 235 MPN/100mL, based on a weighted-average using flow rates from all measured outfalls; or
 - ii. Zero discharge from a Permittee’s individual outfall(s) or from a group of Permittees’ outfall(s) during dry weather; or
 - iii. Demonstration that the MS4 loading of E. coli to the segment or tributary during dry weather is less than or equal to the calculated loading rate that would not cause or contribute to exceedances based on the loading capacity representative of conditions in the River at the time of compliance.
- c. The interim dry weather water quality-based effluent limitations are group-based, shared among all MS4 Permittees that drain to a segment or tributary. However, the interim dry weather water quality-based effluent limitations may be distributed based on proportional drainage area, upon approval of the Regional Water Board Executive Officer.

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E. Legg Lake Trash TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
2. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Legg Lake no later than March 6, 2016, and every year thereafter.
3. Permittees that choose to comply via a full capture compliance strategy must demonstrate a phased implementation of full capture devices attaining interim effluent limitations over the following 8-year period until the final effluent limitation of zero is attained:

<u>Deadline</u>	<u>Effluent Limitation</u>
	<u>Drainage Area covered by Full Capture Systems (%)</u>
<u>March 6, 2008</u>	<u>0</u>
<u>March 6, 2012</u>	<u>20</u>
<u>March 6, 2013</u>	<u>40</u>
<u>March 6, 2014</u>	<u>60</u>
<u>March 6, 2015</u>	<u>80</u>
<u>March 6, 2016</u>	<u>100</u>

Legg Lake Trash Effluent Limitations⁵² (gallons of uncompressed trash per year)

Permittees	Baseline⁵³ (100%)	3/6/2012 (80%)	3/6/2013 (60%)	3/6/2014 (40%)	3/6/2015 (20%)	3/6/2016⁵⁴ (0%)
<u>Los Angeles County</u>	<u>2400.03</u>	<u>1920.02</u>	<u>1440.02</u>	<u>960.01</u>	<u>480.01</u>	<u>0</u>
<u>Los Angeles County Flood Control District</u>	<u>24.05</u>	<u>19.24</u>	<u>14.43</u>	<u>9.62</u>	<u>4.81</u>	<u>0</u>
<u>City of El Monte</u>	<u>509.48</u>	<u>407.58</u>	<u>305.69</u>	<u>203.79</u>	<u>101.90</u>	<u>0</u>
<u>City of South El Monte</u>	<u>3896.76</u>	<u>3117.41</u>	<u>2338.06</u>	<u>1558.70</u>	<u>779.35</u>	<u>0</u>

4. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in E.2 and E.3 above per the provisions in Part VI.E.5.
5. If a Permittee opts to derive site specific trash generation rates through its Trash Monitoring and Reporting Plan (TMRP), the baseline limitation shall be calculated by multiplying the point source area(s) by the derived trash generation rate(s).
6. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in E.2 and E.3 above per the provisions in Part VI.E.5.

E.F. Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL (USEPA established)

1. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
2. Permittees shall comply with the following final WLAs for discharges to the Los Angeles River Estuary per the provisions in Part VI.E.3:

Constituent	WLA (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

3. Receiving Water Limitations
 - a. Permittees shall comply with the following grouped⁵⁵ final single sample bacteria WLAs for the Los Angeles River Estuary per the provisions in Part VI.E.3:

⁵² Water quality-based effluent limitations are expressed as allowable trash discharge relative to baseline Waste Load Allocations.

⁵³ The Regional Water Board calculated the baseline water quality-based effluent limitations for the Permittees based on the estimated trash generation rate of 5334 gallons of uncompressed trash per square mile per year.

⁵⁴ Permittees shall achieve their final effluent limitation of zero trash discharged for the year and every year thereafter.

⁵⁵ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

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Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
	Daily sampling	Weekly sampling
Summer Dry-Weather (April 1 to October 31)	0	0
Winter Dry-Weather (November 1 to March 31)	9	2
Wet Weather ⁵⁶	17	3

- b. Permittees shall comply with the following geometric mean receiving water limitations for all monitoring stations in the Los Angeles River Estuary per the provisions in Part VI.E.3:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

4. Compliance Determination

- a. Permittees may demonstrate compliance with the final dry or weather WLAs by demonstrating that final WLAs expressed as allowable exceedance days are met in the receiving waters or by demonstrating one of the following conditions at outfalls to the receiving waters:
 - i. Flow-weighted concentration of bacterial indicators in MS4 discharges during dry or wet weather is less than or equal to the WLAs in part E.2 above, based on a weighted-average using flow rates from all measured outfalls; or
 - ii. Zero discharge during dry weather.
- b. In addition, individual Permittees or subgroups of Permittees may differentiate their dry or wet weather discharges from other dischargers or upstream contributions by demonstrating one of the following conditions at outfalls to the receiving waters or at segment, tributary or jurisdictional boundaries:
 - i. The flow-weighted concentration of bacterial indicators in a Permittee’s individual discharge or in a group of Permittees’ collective discharge during dry or wet weather is less than or equal to the WLAs in part E.2 above, based on a weighted-average using flow rates from all measured outfalls; or
 - ii. Zero discharge from a Permittee’s individual outfall(s) or from a group of Permittees’ outfall(s) during dry weather.

F.G. Los Angeles Area Lakes TMDLs (USEPA established)

1. Lake Calabasas Nutrient TMDL

⁵⁶ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.
Attachment O –TMDLs in the Los Angeles River WMA

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- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following annual mass-based allocations based on current flow conditions:

Permittee	Total Phosphorus (lb-P/yr)	Total Nitrogen (lb-N/yr)
City of Calabasas	48.5	220

Measured at the point of discharge. The mass-based allocations are equivalent to existing concentrations of 0.066 mg/L total phosphorus as a summer average (May-September) and annual average, and 0.66 mg/L total nitrogen as a summer average (May-September) and annual average based on approved flow conditions.

- d. The following concentration-based WLAs shall apply during both wet and dry weather if:
 - i. The Regional Water Board Executive Officer approves a request by the Permittee that the concentration-based WLAs apply, and the USEPA does not object to the Executive Officer’s decision within 60 days of receiving notice.
 - ii. The Permittee shall submit a request to both the Regional Water Board and USEPA and shall include as part of the request a Lake Management Plan, describing actions that will be implemented to ensure that the applicable water quality objectives for ammonia, dissolved oxygen, and pH are achieved and the chlorophyll a target of 20 ug/L measured as a summer average (May-September) and as an annual average is met.
 - iii. If the applicable water quality objectives for ammonia, dissolved oxygen, pH are achieved, and the chlorophyll a target is met, then the total phosphorus and total nitrogen concentration-based WLAs shall be considered attained.

Permittee	Total Phosphorus (mg-P/L)	Total Nitrogen (mg-N/L)
City of Calabasas	0.1	1.0

Measured as in-lake concentration and applied as a summer average (May-September) and an annual average.

2. Echo Park Lake Nutrient TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following annual mass-based allocations based on current flow conditions:

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Subwatershed	Permittee	Total Phosphorus (lb-P/yr)	Total Nitrogen (lb-N/yr)
Northern	City of Los Angeles	24.7	156
Southern	City of Los Angeles	7.129	49.69

Measured at the point of discharge using a three-year average. The mass-based allocations are equivalent to existing concentrations of 0.12 mg/L total phosphorus as a summer average (May-September) and annual average, and 1.2 mg/L total nitrogen as a summer average (May-September) and annual average based on approved flow conditions.

- d. In assessing compliance with WLAs, Permittees assigned both northern and southern subwatershed allocations may have their allocations combined.
- e. If the applicable water quality objectives for ammonia, dissolved oxygen, and pH are achieved, and the chlorophyll a target of 20 ug/L as a summer average (May-September) and as an annual average is met, in the lake then the total phosphorus and total nitrogen concentration-based WLAs shall be considered attained.

3. Echo Park Lake PCBs TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight)	Total PCBs in the Water Column (ng/L)
Northern	City of Los Angeles	1.77	0.17
Southern	City of Los Angeles	1.77	0.17

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 3.6 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five common carp each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice.

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight) ^{**}	Total PCBs in the Water Column (ng/L) ^{****}
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Northern	City of Los Angeles	59.8	0.17
Southern	City of Los Angeles	59.8	0.17

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

4. Echo Park Lake Chlordane TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (ug/kg dry weight)	Total Chlordane in the Water Column (ng/L)
Northern	City of Los Angeles	2.10	0.59
Southern	City of Los Angeles	2.10	0.59

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 5.6 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five common carp each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice.

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (ug/kg dry weight) ^{*,**}	Total Chlordane in the Water Column (ng/L) ^{*,***}
Northern	City of Los Angeles	3.24	0.59
Southern	City of Los Angeles	3.24	0.59

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

5. Echo Park Lake Dieldrin TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.

REVISITED ALTERNATIVE

- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight)	Dieldrin in the Water Column (ng/L)
Northern	City of Los Angeles	0.80	0.14
Southern	City of Los Angeles	0.80	0.14

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 0.46 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five common carp each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight) ^{*,**}	Dieldrin in the Water Column (ng/L) ^{*,***}
Northern	City of Los Angeles	1.90	0.14
Southern	City of Los Angeles	1.90	0.14

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

6. Echo Park Lake Trash TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Parts VI.E.3 and VI.E.5.
- c. Permittees shall comply with the following WLA:

Permittee	Trash (Gal/year)
City of Los Angeles	0

7. Legg Lake System Nutrient TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.

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- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following annual mass-based allocations based on current flow conditions:

<u>Subwatershed</u>	<u>Permittee</u>	<u>Flow (ac-ft/yr)</u>	<u>Total Phosphorus (lb-P/yr)</u>	<u>Total Nitrogen (lb-N/yr)</u>
Northwestern	County of Los Angeles	33.5	53.6	148.7
Northwestern	South El Monte	308	526.3	1,500.6
Northeastern	El Monte	122	226.6	590.3
Northeastern	County of Los Angeles	8.18	12.8	39.2
Northeastern	South El Monte	287	498.7	1,394.8

Measured at the point of discharge. The mass-based allocations are equivalent to existing concentrations of 0.065 mg/L total phosphorus as a summer average (May-September) and annual average, and 0.65 mg/L total nitrogen as a summer average (May-September) and annual average based on approved flow conditions.

- d. The following concentration-based WLAs shall apply during both wet and dry weather if:
 - i. The Regional Water Board Executive Officer approves a request by a Permittee that the concentration-based WLAs apply, and the USEPA does not object to the Executive Officer’s decision within 60 days of receiving notice.
 - ii. Permittees shall submit a request to both the Regional Water Board and USEPA and shall include as part of the request a Lake Management Plan, describing actions that will be implemented to ensure that the applicable water quality objectives for ammonia, dissolved oxygen, and pH are achieved, and the chlorophyll a target of 20 ug/L as a summer average (May-September) and an annual average is met, in the lake.
 - iii. If the applicable water quality objectives for ammonia, dissolved oxygen, and pH are achieved, and the chlorophyll a target is met, in the lake then the total phosphorus and total nitrogen concentration-based WLAs shall be considered attained.

<u>Subwatershed</u>	<u>Permittee</u>	<u>Total Phosphorus (mg-P/L)</u>	<u>Total Nitrogen (mg-N/L)</u>
Northwestern	County of Los Angeles	0.1	1.0
Northwestern	South El Monte	0.1	1.0
Northeastern	El Monte	0.1	1.0
Northeastern	County of Los Angeles	0.1	1.0
Northeastern	South El Monte	0.1	1.0

Measured as an in-lake concentration. Applied as a summer average (May-September) and an annual average.

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7.8. Peck Road Park Lake Nutrient TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following annual mass-based allocations based on current flow conditions:

Subwatershed	Permittee	Total Phosphorus (lb-P/yr)	Total Nitrogen (lb-N/yr)
Eastern	Arcadia	383	2,320
Eastern	Bradbury	497	3,223
Eastern	Duarte	1,540	9,616
Eastern	Irwindale	496	3,487
Eastern	County of Los Angeles	924	5,532
Eastern	Monrovia	6,243	38,736
Near Lake	Arcadia	158	1,115
Near Lake	El Monte	96.2	602
Near Lake	Irwindale	28.2	207
Near Lake	County of Los Angeles	129	773
Near Lake	Monrovia	60.4	415
Western	Arcadia	2,840	16,334
Western	County of Los Angeles	467	2,818
Western	Monrovia	425	2,678
Western	Sierra Madre	695	4,254

Measured at the point of discharge using a three-year average. The mass-based allocations are equivalent to existing concentrations of 0.076 mg/L total phosphorus as a summer average (May-September) and annual average, and 0.76 mg/L total nitrogen as a summer average (May-September) and annual average based on approved flow conditions.

- d. If the applicable water quality objectives for ammonia, dissolved oxygen, and pH are achieved, and the chlorophyll a target of 20 ug/L as a summer average (May-September) and as an annual average is met, in the lake then the total phosphorus and total nitrogen concentration-based WLAs shall be considered attained.

8.9. Peck Road Park Lake PCBs TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

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Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight)	Total PCBs in the Water Column (ng/L)
Eastern	Arcadia	1.29	0.17
Eastern	Bradbury	1.29	0.17
Eastern	Duarte	1.29	0.17
Eastern	Irwindale	1.29	0.17
Eastern	County of Los Angeles	1.29	0.17
Eastern	Monrovia	1.29	0.17
Near Lake	Arcadia	1.29	0.17
Near Lake	El Monte	1.29	0.17
Near Lake	Irwindale	1.29	0.17
Near Lake	County of Los Angeles	1.29	0.17
Near Lake	Monrovia	1.29	0.17
Western	Arcadia	1.29	0.17
Western	County of Los Angeles	1.29	0.17
Western	Monrovia	1.29	0.17
Western	Sierra Madre	1.29	0.17

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 3.6 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five largemouth bass each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice.

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight) ^{*,**}	Total PCBs in the Water Column (ng/L) ^{*,***}
Eastern	Arcadia	59.8	0.17
Eastern	Bradbury	59.8	0.17
Eastern	Duarte	59.8	0.17
Eastern	Irwindale	59.8	0.17
Eastern	County of Los Angeles	59.8	0.17
Eastern	Monrovia	59.8	0.17
Near Lake	Arcadia	59.8	0.17
Near Lake	El Monte	59.8	0.17
Near Lake	Irwindale	59.8	0.17
Near Lake	County of Los Angeles	59.8	0.17
Near Lake	Monrovia	59.8	0.17
Western	Arcadia	59.8	0.17
Western	County of Los Angeles	59.8	0.17

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Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight) ^{*,**}	Total PCBs in the Water Column (ng/L) ^{*,***}
Western	Monrovia	59.8	0.17
Western	Sierra Madre	59.8	0.17

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

9-10. Peck Road Park Lake Chlordane TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (ug/kg dry weight)	Total Chlordane in the Water Column (ng/L)
Eastern	Arcadia	1.73	0.59
Eastern	Bradbury	1.73	0.59
Eastern	Duarte	1.73	0.59
Eastern	Irwindale	1.73	0.59
Eastern	County of Los Angeles	1.73	0.59
Eastern	Monrovia	1.73	0.59
Near Lake	Arcadia	1.73	0.59
Near Lake	El Monte	1.73	0.59
Near Lake	Irwindale	1.73	0.59
Near Lake	County of Los Angeles	1.73	0.59
Near Lake	Monrovia	1.73	0.59
Western	Arcadia	1.73	0.59
Western	County of Los Angeles	1.73	0.59
Western	Monrovia	1.73	0.59
Western	Sierra Madre	1.73	0.59

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 5.6 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five largemouth bass each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice:

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Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (ug/kg dry weight) ^{*,**}	Total Chlordane in the Water Column (ng/L) ^{*,***}
Eastern	Arcadia	3.24	0.59
Eastern	Bradbury	3.24	0.59
Eastern	Duarte	3.24	0.59
Eastern	Irwindale	3.24	0.59
Eastern	County of Los Angeles	3.24	0.59
Eastern	Monrovia	3.24	0.59
Near Lake	Arcadia	3.24	0.59
Near Lake	El Monte	3.24	0.59
Near Lake	Irwindale	3.24	0.59
Near Lake	County of Los Angeles	3.24	0.59
Near Lake	Monrovia	3.24	0.59
Western	Arcadia	3.24	0.59
Western	County of Los Angeles	3.24	0.59
Western	Monrovia	3.24	0.59
Western	Sierra Madre	3.24	0.59

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

10.11. Peck Road Park DDT TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Total DDT associated with Suspended Sediment (ug/kg dry weight)	4-4' DDT in the Water Column (ng/L)
Eastern	Arcadia	5.28	0.59
Eastern	Bradbury	5.28	0.59
Eastern	Duarte	5.28	0.59
Eastern	Irwindale	5.28	0.59
Eastern	County of Los Angeles	5.28	0.59
Eastern	Monrovia	5.28	0.59
Near Lake	Arcadia	5.28	0.59
Near Lake	El Monte	5.28	0.59
Near Lake	Irwindale	5.28	0.59
Near Lake	County of Los Angeles	5.28	0.59
Near Lake	Monrovia	5.28	0.59
Western	Arcadia	5.28	0.59
Western	County of Los Angeles	5.28	0.59
Western	Monrovia	5.28	0.59

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Subwatershed	Permittee	Total DDT associated with Suspended Sediment (ug/kg dry weight)	4-4' DDT in the Water Column (ng/L)
Western	Sierra Madre	5.28	0.59

Measured at the point of discharge. Applied as an annual average.

11.12. Peck Road Park Lake Dieldrin TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight)	Dieldrin in the Water Column (ng/L)
Eastern	Arcadia	0.43	0.14
Eastern	Bradbury	0.43	0.14
Eastern	Duarte	0.43	0.14
Eastern	Irwindale	0.43	0.14
Eastern	County of Los Angeles	0.43	0.14
Eastern	Monrovia	0.43	0.14
Near Lake	Arcadia	0.43	0.14
Near Lake	El Monte	0.43	0.14
Near Lake	Irwindale	0.43	0.14
Near Lake	County of Los Angeles	0.43	0.14
Near Lake	Monrovia	0.43	0.14
Western	Arcadia	0.43	0.14
Western	County of Los Angeles	0.43	0.14
Western	Monrovia	0.43	0.14
Western	Sierra Madre	0.43	0.14

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 0.46 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five largemouth bass each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight) ^{*,**}	Dieldrin in the Water Column (ng/L) ^{*,***}
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Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight) ^{*,**}	Dieldrin in the Water Column (ng/L) ^{*,***}
Eastern	Arcadia	1.90	0.14
Eastern	Bradbury	1.90	0.14
Eastern	Duarte	1.90	0.14
Eastern	Irwindale	1.90	0.14
Eastern	County of Los Angeles	1.90	0.14
Eastern	Monrovia	1.90	0.14
Near Lake	Arcadia	1.90	0.14
Near Lake	El Monte	1.90	0.14
Near Lake	Irwindale	1.90	0.14
Near Lake	County of Los Angeles	1.90	0.14
Near Lake	Monrovia	1.90	0.14
Western	Arcadia	1.90	0.14
Western	County of Los Angeles	1.90	0.14
Western	Monrovia	1.90	0.14
Western	Sierra Madre	1.90	0.14

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

12.13. Peck Road Park Lake Trash TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Parts VI.E.3 and VI.E.5.
- c. Permittees shall comply with the following WLA:

Permittee	Trash (gal/year)
Arcadia	0
Bradbury	0
Duarte	0
El Monte	0
Irwindale	0
County of Los Angeles	0
Monrovia	0
Sierra Madre	0

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ATTACHMENT P. TMDLs IN SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA

A. San Gabriel River Metals and Impaired Tributaries Metals and Selenium TMDL (USEPA established)

1. Permittees subject to the provisions below are identified in Attachment K, Table K-6.
2. Permittees shall comply with the following grouped⁵⁷ wet weather⁵⁸ WLAs, expressed as total recoverable metals discharged to all upstream reaches and tributaries of the San Gabriel River Reach 2 and Coyote Creek per the provisions in Part VI.E.3:

Water Body	WLA Daily Maximum (kg/day)		
	Copper	Lead	Zinc
San Gabriel Reach 2	---	81.34 $\mu\text{g/L}$ x daily storm volume (L)	---
Coyote Creek	24.71 $\mu\text{g/L}$ x daily storm volume (L)	96.99 $\mu\text{g/L}$ x daily storm volume (L)	144.57 $\mu\text{g/L}$ x daily storm volume (L)

3. Permittees shall comply with the following grouped⁷²⁵³ dry weather WLAs, expressed as total recoverable metals discharged to San Gabriel River Reach 1, Coyote Creek, San Gabriel River Estuary, and San Jose Creek Reach 1 and Reach 2 per the provisions in Part VI.E.3:

Water Body	WLA Daily Maximum	
	Copper	Selenium
San Gabriel Reach 1	18 $\mu\text{g/L}$	---
Coyote Creek	0.941 kg/day*	---
San Gabriel River Estuary	3.7 $\mu\text{g/L}$	---
San Jose Creek Reach 1 and 2	---	5 $\mu\text{g/L}$

*Calculated based upon the median flow at LACDPW Station F354-R of 19 cfs multiplied by the numeric target of 20 $\mu\text{g/L}$, minus direct air deposition of 0.002 kg/d.

4. Permittees may convert the grouped mass-based WLAs into individual WLAs based on the percentage of the watershed and land uses within the Permittee’s jurisdiction, upon approval of the Regional Water Board Executive Officer.

~~B. Legg Lake Trash TMDL~~

- ~~1. Permittees subject to the provisions below are identified in Attachment K, Table K-6.~~
- ~~2. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Legg Lake no later than March 6, 2016, and every year thereafter.~~

⁵⁷ The wet weather and dry weather water WLAs are group-based and shared among all MS4 Permittees, which includes LA MS4 Permittees, the City of Long Beach, and Orange County MS4 Permittees located within the drainage area and Caltrans.

⁵⁸ In San Gabriel River Reach 2, wet weather TMDLs apply when the maximum daily flow of the river is equal to or greater than 260 cfs as measured at USGS station 11085000, located at the bottom of Reach 3 just above the Whittier Narrows Dam. In Coyote Creek, wet weather TMDLs apply when the maximum daily flow in the creek is equal to or greater than 156 cfs as measured at LACDPW flow gauge station F354-R, located at the bottom of the creek, just above the Long Beach WRP.

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- ~~3. Permittees that choose to comply via a full capture compliance strategy must demonstrate a phased implementation of full capture devices attaining interim effluent limitations over the following 8-year period until the final effluent limitation of zero is attained:~~

Deadline	Effluent Limitation
	Drainage Area covered by Full Capture Systems (%)
March 6, 2008	0
March 6, 2012	20
March 6, 2013	40
March 6, 2014	60
March 6, 2015	80
March 6, 2016	100

~~Legg Lake Trash Effluent Limitations⁵⁹ (gallons of uncompressed trash per year)~~

Permittees	Baseline ⁶⁰ (100%)	3/6/2012 (80%)	3/6/2013 (60%)	3/6/2014 (40%)	3/6/2015 (20%)	3/6/2016 ⁶¹ (0%)
Los Angeles County	2400.03	1920.02	1440.02	960.01	480.01	0
Los Angeles County Flood Control District	24.05	19.24	14.43	9.62	4.81	0
City of El Monte	509.48	407.58	305.69	203.79	101.90	0
City of South El Monte	3896.76	3117.41	2338.06	1558.70	779.35	0

- ~~4. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in B.2 and B.3 above per the provisions in Part VI.E.5.~~
- ~~5. If a Permittee opts to derive site specific trash generation rates through its Trash Monitoring and Reporting Plan (TMRP), the baseline limitation shall be calculated by multiplying the point source area(s) by the derived trash generation rate(s).~~
- ~~6. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in B.2 and B.3 above per the provisions in Part VI.E.5.~~

⁵⁹ ~~Water quality-based effluent limitations are expressed as allowable trash discharge relative to baseline Waste Load Allocations.~~

⁶⁰ ~~The Regional Water Board calculated the baseline water quality-based effluent limitations for the Permittees based on the estimated trash generation rate of 5334 gallons of uncompressed trash per square mile per year.~~

⁶¹ ~~Permittees shall achieve their final effluent limitation of zero trash discharged for the year and every year thereafter.~~

C.B. Los Angeles Area Lakes TMDLs⁶² (USEPA established)

1. Legg Lake System Nutrient TMDL

- ~~a. Permittees subject to the provisions below are identified in Attachment K, Table K-6.~~
- ~~b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.~~
- ~~c. Permittees shall comply with the following annual mass-based allocations based on current flow conditions:~~

Subwatershed	Permittee	Flow (ac-ft/yr)	Total Phosphorus (lb-P/yr)	Total Nitrogen (lb-N/yr)
Northwestern	County of Los Angeles	33.5	53.6	148.7
Northwestern	South El Monte	308	526.3	1,500.6
Northeastern	El Monte	122	226.6	590.3
Northeastern	County of Los Angeles	8.18	12.8	39.2
Northeastern	South El Monte	287	498.7	1,394.8

Measured at the point of discharge. The mass-based allocations are equivalent to existing concentrations of 0.065 mg/L total phosphorus as a summer average (May-September) and annual average, and 0.65 mg/L total nitrogen as a summer average (May-September) and annual average based on approved flow conditions.

- ~~d. The following concentration-based WLAs shall apply during both wet and dry weather if:~~
 - ~~i. The Regional Water Board Executive Officer approves a request by a Permittee that the concentration-based WLAs apply, and the USEPA does not object to the Executive Officer's decision within 60 days of receiving notice.~~
 - ~~ii. Permittees shall submit a request to both the Regional Water Board and USEPA and shall include as part of the request a Lake Management Plan, describing actions that will be implemented to ensure that the applicable water quality objectives for ammonia, dissolved oxygen, and pH are achieved, and the chlorophyll a target of 20 ug/L as a summer average (May-September) and an annual average is met, in the lake.~~
 - ~~iii. If the applicable water quality objectives for ammonia, dissolved oxygen, and pH are achieved, and the chlorophyll a target is met, in the lake then the total phosphorus and total nitrogen concentration-based WLAs shall be considered attained.~~

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⁶² Los Angeles Area Lakes TMDL includes multiple watershed management areas. Attachment P –TMDLs in the San Gabriel River WMA

Subwatershed	Permittee	Total Phosphorus (mg-P/L)	Total Nitrogen (mg-N/L)
Northwestern	County of Los Angeles	0.4	4.0
Northwestern	South El Monte	0.4	4.0
Northeastern	El Monte	0.4	4.0
Northeastern	County of Los Angeles	0.4	4.0
Northeastern	South El Monte	0.4	4.0

~~Measured as an in-lake concentration. Applied as a summer average (May-September) and an annual average.~~

2.1. Puddingstone Reservoir Nutrient TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-6.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following annual mass-based allocations based on current flow conditions:

Subwatershed	Permittee	Total Phosphorus (lb-P/yr)	Total Nitrogen (lb-N/yr)
Northern	Claremont	169	829
Northern	County of Los Angeles	741	3,390
Northern	La Verne	2,772	11,766
Northern	Pomona	6.30	28.3
Northern	San Dimas	31.1	137

Measured at the point of discharge. The mass-based allocations are equivalent to existing concentrations of 0.071 mg/L total phosphorus as a summer average (May-September) and annual average, and 0.71 mg/L total nitrogen as a summer average (May-September) and annual average based on approved flow conditions.

- d. The following concentration-based WLAs shall apply during both wet and dry weather if:
 - i. The Regional Water Board Executive Officer approves a request by a Permittee that the concentration-based WLAs apply, and the USEPA does not object to the Executive Officer’s decision within 60 days of receiving notice.
 - ii. Permittees shall submit a request to both the Regional Water Board and USEPA and shall include as part of the request a Lake Management Plan, describing actions that will be implemented to ensure that the applicable water quality objectives for ammonia, dissolved oxygen, and pH are achieved and the chlorophyll a target of 20 ug/L as a summer average (May-September) and an annual average is met, in the lake.
 - iii. If the applicable water quality objectives for ammonia, dissolved oxygen, and pH are achieved, and the chlorophyll a target is met, in the lake then the total

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phosphorus and total nitrogen concentration-based WLAs shall be considered attained.

Subwatershed	Permittee	Total Phosphorus (mg-P/L)	Total Nitrogen (mg-N/L)
Northern	Claremont	0.1	1.0
Northern	County of Los Angeles	0.1	1.0
Northern	La Verne	0.1	1.0
Northern	Pomona	0.1	1.0
Northern	San Dimas	0.1	1.0

Measured as an in-lake concentration. Applied as a summer average (May-September) and an annual average.

3.2. Puddingstone Reservoir Mercury TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-6.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs during both wet and dry weather:

Subwatershed	Permittee	Total Mercury (g-Hg/yr)
Northern	Claremont	0.674
Northern	County of Los Angeles	2.79
Northern	La Verne	10.6
Northern	Pomona	0.026
Northern	San Dimas	0.109

Measured at the point of discharge.

4.3. Puddingstone Reservoir PCBs TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-6.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight)	Total PCBs in the Water Column (ng/L)
Northern	Claremont	0.59	0.17
Northern	County of Los Angeles	0.59	0.17
Northern	La Verne	0.59	0.17
Northern	Pomona	0.59	0.17
Northern	San Dimas	0.59	0.17

Measured at the point of discharge. Applied as an annual average.

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- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 3.6 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five common carp each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice.

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight) **	Total PCBs in the Water Column (ng/L) ****
Northern	Claremont	59.8	0.17
Northern	County of Los Angeles	59.8	0.17
Northern	La Verne	59.8	0.17
Northern	Pomona	59.8	0.17
Northern	San Dimas	59.8	0.17

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

5.4. Puddingstone Reservoir Chlordane TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-6.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (ug/kg dry weight)	Total Chlordane in the Water Column (ng/L)
Northern	Claremont	0.75	0.57
Northern	County of Los Angeles	0.75	0.57
Northern	La Verne	0.75	0.57
Northern	Pomona	0.75	0.57
Northern	San Dimas	0.75	0.57

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 5.6 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five common carp each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice.

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (ug/kg dry weight) ^{*,**}	Total Chlordane in the Water Column (ng/L) ^{*,***}
Northern	Claremont	3.24	0.57
Northern	County of Los Angeles	3.24	0.57
Northern	La Verne	3.24	0.57
Northern	Pomona	3.24	0.57
Northern	San Dimas	3.24	0.57

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

6.5. Puddingstone Reservoir Dieldrin TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-6.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight)	Dieldrin in the Water Column (ng/L)
Northern	Claremont	0.22	0.14
Northern	County of Los Angeles	0.22	0.14
Northern	La Verne	0.22	0.14
Northern	Pomona	0.22	0.14
Northern	San Dimas	0.22	0.14

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 0.46 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five common carp each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice.

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight) ^{*,**}	Dieldrin in the Water Column (ng/L) ^{*,***}
Northern	Claremont	1.90	0.14
Northern	County of Los Angeles	1.90	0.14
Northern	La Verne	1.90	0.14

Northern	Pomona	1.90	0.14
Northern	San Dimas	1.90	0.14

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

7.6. Puddingstone Reservoir DDT TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-6.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Total DDT associated with Suspended Sediment (ug/kg dry weight)	4-4' DDT in the Water Column (ng/L)
Northern	Claremont	3.94	0.59
Northern	County of Los Angeles	3.94	0.59
Northern	La Verne	3.94	0.59
Northern	Pomona	3.94	0.59
Northern	San Dimas	3.94	0.59

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 21 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five common carp each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice.

Subwatershed	Permittee	Total DDT associated with Suspended Sediment (ug/kg dry weight) ^{*,**}	4-4' DDT in the Water Column (ng/L) ^{*,***}
Northern	Claremont	5.28	0.59
Northern	County of Los Angeles	5.28	0.59
Northern	La Verne	5.28	0.59
Northern	Pomona	5.28	0.59
Northern	San Dimas	5.28	0.59

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

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**ATTACHMENT Q. TMDLs IN LOS CERRITOS CHANNEL AND ALAMITOS BAY
WATERSHED MANAGEMENT AREA**

A. Los Cerritos Channel Metals TMDL (USEPA established)

1. Permittees subject to the provisions below are identified in Attachment K, Table K-7.
2. Permittees shall comply with the following dry weather⁶³ WLAs, expressed as total recoverable metals discharged to Los Cerritos Channel, per the provisions in Part VI.E.3:

Constituent	WLA Daily Maximum (g/day)
Copper	67.2

3. Permittees shall comply with the following wet weather⁶⁴ WLA, expressed as total recoverable metals discharged to Los Cerritos Channel, per the provisions in Part VI.E.3:

Constituent	WLA Daily Maximum (g/day)
Copper	$4.709 \times 10^{-6} \times$ daily storm volume (L)
Lead	$26.852 \times 10^{-6} \times$ daily storm volume (L)
Zinc	$46.027 \times 10^{-6} \times$ daily storm volume (L)

B. Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-7.
2. Permittees shall comply with the following interim water quality-based effluent limitations as of the effective date of this Order, for sediments within Colorado Lagoon:

Constituent	Interim Concentration-based Effluent Limitations Monthly Average (µg/dry kg)
Chlordane	129.65
Dieldrin	26.20
Lead	399,500
Zinc	565,000
PAHs	4,022
PCBs	89.90
DDT	149.80

3. Permittees shall comply with the following final water quality-based effluent limitations no later than July 28, 2018, for sediments within Colorado Lagoon:

⁶³ Dry weather is defined as any day when the maximum daily flow in Los Cerritos Channel is less than 23 cubic feet per second (cfs) measured at Stearns Street Monitoring Station.

⁶⁴ Wet weather is defined as any day when the maximum daily flow in Los Cerritos Channel is equal to or greater than 23 cfs measured at Stearns Street Monitoring Station.

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Constituent	Final Concentration Based Effluent Limitations Monthly Average (µg/dry kg)
Chlordane	0.50
Dieldrin	0.02
Lead	46,700
Zinc	150,000
PAHs	4,022
PCBs	22.70
DDT	1.58

4. The mass-based water quality-based effluent limitations are shared by the MS4 Permittees, which includes the LACFCD, City of Long Beach and Caltrans. Permittees shall comply with the following grouped final water quality-based effluent limitations no later than July 28, 2018, expressed as an annual discharge of sediment to Colorado Lagoon:

Constituent	Annual Mass-based Effluent Limitations (mg/yr)				
	Project 452	Line I	Termino Ave	Line K	Line M
Chlordane	5.10	3.65	12.15	1.94	0.73
Dieldrin	0.20	0.15	0.49	0.08	0.03
Lead	476,646.68	340,455.99	1,134,867.12	181,573.76	68,116.09
Zinc	1,530,985.05	1,093,541.72	3,645,183.47	583,213.37	218,788.29
PAHs	41,050.81	29,321.50	97,739.52	15,637.89	5,866.44
PCBs	231.69	165.49	551.64	88.26	33.11
DDT	16.13	11.52	38.40	6.14	2.30

5. Compliance with the concentration-based water quality-based effluent limitations shall be determined by pollutant concentrations in the sediment in Colorado Lagoon at points in the West Arm, North Arm and Central Arm that represent the cumulative inputs from the MS4 drainage to the lagoon.

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**ATTACHMENT R. TMDLs IN THE MIDDLE SANTA ANA RIVER WATERSHED
MANAGEMENT AREA (SANTA ANA REGION TMDL)****A. Middle Santa Ana River Watershed Bacterial Indicator TMDLs**

1. Permittees subject to the provisions below are identified in Attachment K, Table K-8.
2. Permittees shall comply with the following final water quality-based effluent limitations for discharges to San Antonio Creek and Chino Creek during dry weather no later than December 31, 2015, and during wet weather no later than December 31, 2025:
 - a. Fecal coliform⁶⁵: geometric mean less than 180 organisms/100 mL based on five or more samples during any 30-day period, and not more than 10% of the samples exceed 360 organisms/100 mL during any 30-day period.
 - b. *E. coli*: ~~*E. coli*~~: geometric mean less than 113 organisms/100 mL based on five or more samples during any 30-day period, and not more than 10% of the samples exceed 212 organisms/100 mL during any 30-day period.
3. Permittees shall comply with the following receiving water limitations for discharges to San Antonio Creek and Chino Creek during dry weather no later than December 31, 2015, and during wet weather no later than December 31, 2025:
 - a. Fecal coliform⁶⁶: geometric mean less than 200 organisms/100 mL based on 5 samples during any 30-day period, and not more than 10% of the samples exceed 400 organisms/100 mL during any 30-day period.
 - b. *E. coli*: geometric mean less than 126 organisms/100 mL based on 5 samples during any 30-day period, and not more than 10% of the samples exceed 235 organisms/100 mL during any 30-day period.

B. Section A of this Attachment R shall not be applicable during the effective dates of any NPDES permit that:

1. Is issued by the Regional Water Quality Control Board, Santa Ana Region, pursuant to a valid and enforceable designation agreement between this Regional Board and the Santa Ana Regional Board under Water Code section 13228, that is applicable to MS4 discharges by the Permittees identified in Attachment K, Table K-8; and
2. The designation agreement delegates the Santa Ana Regional Board as the regulator MS4 of discharges by the Permittees identified in Attachment K, Table K-8, to ensure compliance with the Middle Santa Ana River Watershed Bacterial Indicator TMDLs, Resolution No. R8-2005-0001, in satisfaction of the requirements of 40 CFR section 122.44(d)(1)(vii)(B).

⁶⁵ The fecal coliform water quality-based effluent limitations become ineffective upon the replacement of the REC-1 fecal coliform water quality objectives with REC-1 *E. coli* water quality objectives in the Santa Ana Region Basin Plan.

⁶⁶ The fecal coliform receiving water limitations become ineffective upon the replacement of the REC-1 fecal coliform water quality objectives with REC-1 *E. coli* water quality objectives in the Santa Ana Region Basin Plan.

Kelley, Sandra@Waterboards

From: lyris@swrcb18.waterboards.ca.gov
Sent: Friday, October 19, 2012 3:55 PM
To: Kelley, Sandra@Waterboards
Cc: Purdy, Renee@Waterboards
Subject: Revised Fact Sheet -- NPDES Permit for MS4 Discharges within the Coastal Watersheds of Los Angeles County
Attachments: REVISED DRAFT - Attachment F - 10-19-12.pdf

Please see attachment

Thank You

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2/2/2011 12:04	ADRIEN236@VLPRODUCE.COM	ADRIEN F. MADDALENO
6/22/2010 11:57	AEMiller@waterboards.ca.gov	Alan E. Miller
3/27/2012 13:25	Berry.Ueoka@EverestConsultants.com	Berry Ueoka
3/22/2012 15:22	BryantA@lwa.com	Bryant Alvarado
11/15/2010 7:46	CaliforniaWaterTechnologies@gmail.com	Carlos Aguilar
7/6/2009 13:38	City_manager@ci.glendora.ca.us	Chris Jeffers
11/16/2011 7:58	DLiu@DiamondBarCA.Gov	David G. Liu
11/8/2012 15:11	Dan.Askenaizer@WQTS.com	Dan Askenaizer
6/11/2011 22:09	Daniel.Lee@Arcadis-us.com	Daniel K. Lee
2/22/2010 18:03	Dave@Bubalo.com	Dave Sorem
5/2/2011 6:54	Debbie.Neev@gmail.com	Deborah Neev
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6/12/2012 11:32	Fresh@freshcreek.com	wallytrnka
10/5/2010 11:14	Gerhardt.Hubner@ventura.org	Gerhardt Hubner
3/22/2010 15:01	Hamid.Tadayon@lacity.org	Hamid Tadayon
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1/19/2010 11:06	Jeremy.Bock@Kiewit.com	Jeremy Bock
3/7/2012 16:27	Jim@CuratingLA.com	Jim Gilbert
7/6/2009 13:35	John.Beshay@westcovina.org	John Beshay
7/28/2011 16:10	Joyntventr@aol.com	Jayne Staley
8/29/2011 14:09	Julie_Carver@ci.pomona.ca.us	Julie Carver
7/6/2009 13:53	Kaden.Young@culvercity.org	Kaden Young
11/16/2011 8:45	LLanger@localgovlaw.com	Lauren Langer
4/5/2011 9:34	Leroy.Richards@msh.dmh.ca.gov	LeRoy Richards
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6/3/2010 12:43	blosey@rbf.com	Brad Losey
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3/22/2011 15:43	calmetals@gmail.com	heather kline

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3/22/2012 14:29 msgrajeda@picowaterdistrict.net	Mark Grajeda
9/3/2009 14:01 msolorzano@mclam.com	Marcela Solorzano
7/31/2012 10:31 mthorme@downeybrand.com	Melissa Thorme
3/15/2011 9:30 mvazquez@golder.com	Misty Vazquez
9/14/2012 12:16 myanai@counsel.lacounty.gov	Mark Yanai
7/13/2012 11:30 myoung@awattorneys.com	Marie W. Young
11/8/2011 14:01 myriam.cardenas@smgov.net	Myriam Cardenas
7/24/2012 19:24 naomistone@mugenkioku.com	Naomi Stone
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7/6/2009 13:52 nasser.sh@lcf.ca.gov	Nasser Shoushtarian
5/20/2010 7:53 navedissian@quakercityplating.com	NICK AVEDISSIAN
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11/5/2011 20:04 neilandeb@aol.com	Neil Dipprey
8/6/2009 11:06 ngarrison@nrhc.org	Noah Garrison
11/30/2009 11:21 nisheeth.kakarala@lacity.org	Nisheeth Kakarala
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7/6/2009 13:43 ocramer@santa-clarita.com	Oliver Cramer
10/28/2011 14:52 ogalang@brwncald.com	Oliver D. Galang PE
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4/1/2011 14:18 r.appy@cox.net	Ralph Appy
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11/16/2011 9:01 rbeste@torranceca.gov	Rob Beste
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12/28/2011 16:43 rdrayse@treepeople.org	Rebecca Drayse
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ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

As described in Part II of this Order, this Fact Sheet sets forth the significant ~~sets forth the significant~~ factual, legal, methodological, and policy rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for dischargers in California. ~~Only those sections or subsections of this Order that are specifically identified as “not applicable” have been determined not to apply to the Dischargers covered by this Order. Sections or subsections of this Order not specifically identified as “not applicable” are fully applicable to the Dischargers.~~

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility and the Dischargers.

Table F-1. Facility and Discharger Information

WDID	Various (See Table 4 of Order)
Dischargers	The Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the <u>Los Angeles County Flood Control District service area coastal watersheds of Los Angeles County</u> with the exception of the City of Long Beach (See Table 4 of Order)
Name of Facility	Municipal Separate Storm Sewer Systems (MS4s) within the <u>Coastal Watersheds of Los Angeles County Flood Control District service area, the County of Los Angeles, and 84 incorporated cities within the Los Angeles County Flood Control District</u> with the exception of the City of Long Beach MS4
Facility Address	Various
Facility Contact, Title and Phone	Various (See Table 4 of Order)
Mailing Address	Various (See Table 4 of Order)
Billing Address	Same as above
Type of Facility	Large Municipal Separate Storm Sewer System (MS4) ¹

¹ According to 40 CFR § 122.26(b)(8), “[a] municipal separate storm sewer system (MS4) means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;
- (ii) Designed or used for collecting or conveying storm water;
- (iii) Which is not a combined sewer; and
- (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.”

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Major or Minor Facility	Major
Watersheds	(1) Santa Clara River Watershed; (2) Santa Monica Bay Watershed Management Area, including Malibu Creek Watershed and Ballona Creek Watershed; (3) Los Angeles River Watershed; (4) Dominguez Channel and Greater Los Angeles/Long Beach Harbors Watershed Management Area; (5) Los Cerritos Channel and Alamitos Bay Watershed Management Area; (6) San Gabriel River Watershed; and (7) Santa Ana River Watershed
Receiving Water	Surface waters identified in Tables 2-1, 2-1a, 2-3, and 2-4, and Appendix 1, Table 1 of the Water Quality Control Plan - Los Angeles Region (Basin Plan), and other unidentified tributaries to these surface waters within the following Watershed Management Areas: (1) Santa Clara River Watershed; (2) Santa Monica Bay Watershed Management Area, including Malibu Creek Watershed and Ballona Creek Watershed; (3) Los Angeles River Watershed; (4) Dominguez Channel and Greater Los Angeles/Long Beach Harbors Watershed Management Area; (5) Los Cerritos Channel and Alamitos Bay Watershed Management Area; (6) San Gabriel River Watershed; and (7) Santa Ana River Watershed ² .
Receiving Water Type	Inland surface waters, estuarine waters, and marine waters, including wetlands, lakes, rivers, estuaries, lagoons, harbors, bays, and beaches

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The Los Angeles County Flood Control District, Los Angeles County, and the 84 municipalities listed in Table F-2 above are the owners and/or operators³ of the Los Angeles County Municipal Separate Storm Sewer Systems within the Coastal Watersheds of Los Angeles County (hereinafter Facility).

For the purposes of this Order, the entities listed in Table 4 of the Order are hereinafter referred to separately as “Permittees” and jointly as the “Dischargers.” References to “discharger” or “permittee” or “co-permittee” or “municipality” in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Dischargers or Permittees herein.

² Note that the Santa Ana River Watershed lies primarily within the boundaries of the Santa Ana Regional Water Quality Control Board. However, a portion of the Chino Basin subwatershed lies within the jurisdictions of Pomona and Claremont in Los Angeles County. The primary receiving water within the Los Angeles County portion of the Chino Basin subwatershed are San Antonio Creek and Chino Creek.

³ Owner or operator means the owner or operator of any facility or activity subject to regulation under the NPDES program (40 CFR § 122.2).

II. FACILITY DESCRIPTION**A. Description of the ~~Los Angeles County~~ Permittees' MS4s**

The ~~Los Angeles County~~ Permittees' MS4s, like many MS4s in the nation, ~~is~~ are based on regional floodwater management systems that use both natural and altered water bodies to achieve flood management goals. The ~~Los Angeles County~~ Permittees' MS4s ~~is~~ comprise a large interconnected system, controlled in large part by the Los Angeles County Flood Control District (LACFCD), among others, and used by multiple cities along with Los Angeles County. This extensive system conveys storm water and non-storm water across municipal boundaries where it is commingled within the MS4 and then discharged to a receiving water bodiesy.

In 1915, the California Legislature enacted the Los Angeles County Flood Control Act, establishing the Los Angeles County Flood Control District (LACFCD). The objects and purposes of the Act are to provide for the control and conservation of the flood, storm and other waste waters within the flood control district. Among its other powers, the LACFCD also has the power to preserve, enhance, and add recreational features to lands or interests in lands contiguous to its properties for the protection, preservation, and use of the scenic beauty and natural environment for the properties or the lands. The LACFCD is governed, as a separate entity, by the County of Los Angeles Board of Supervisors.

~~The Los Angeles County Flood Control Act was passed in 1915. The original Los Angeles MS4 was developed in the 1930s by the U.S. Army Corps of Engineers (ACOE). As Los Angeles began to grow rapidly in the 1920s and 1930s, storm water that was once absorbed by acres of undeveloped land began to run off the newly paved and developed areas, leading to an increased amount of water flowing into the region's rivers and local creeks. These waterways could not contain the increased amount of water and the region experienced extensive flooding. In response, the ACOE lined the Los Angeles River and Ballona Creek with concrete and initiated the development of an underground urban drainage system. As Los Angeles continued to grow, the complex drainage system we now know as the Los Angeles County MS4 developed.~~

The area covered under this Order encompasses more than 3,000 square miles. This area contains a vast drainage network that serves incorporated and unincorporated areas in every Watershed Management Area within the Los Angeles Region. Maps depicting the major drainage infrastructure within the area covered under this Order are included in Attachment C of this Order.~~The Los Angeles County Flood Control District boundaries service area encompass more than 3,000 square miles, 85 incorporated cities, unincorporated areas, and approximately 2.1 million land parcels~~

~~The Los Angeles County Flood Control District owns drainage infrastructure, including owning or maintaining easements for drainage facilities and access, within incorporated and unincorporated areas in every watershed in the Los Angeles Region, including 500 miles of open channels, 2,900 miles of underground storm drains, over 80,000 catch basins, and 52 pump stations.~~

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The total length of the ~~greater LA County~~ Permittees' MS4s, and the locations of all storm drain connections, are not known exactly, as a comprehensive map for the MS4 does not exist. Rough estimates, based on information from the LACFCD and large municipalities (population > 100,000), indicate that the length exceeds 4,300 miles, as shown below. The LACFCD's system includes the majority of drainage infrastructure within incorporated and unincorporated areas in every watershed, including approximately 500 miles of open channel, 3,500 miles of underground drains, and an estimated 88,800 catch basins, and several dams. Portions of the LACFCD's current system were originally unmodified natural rivers and water courses.

Table F-2. Extent of LA County Select Permittees' MS4s

Permittee	Area (Square Miles)	Catch Basins	Storm Drain Length	Open Channel Length
<u>LACFCD/</u> LA County	3,100	738 8,000	2,650 3,500 miles	450 500 miles
City of LA	469	30,000	1,600 miles	31 miles
El Monte	10	316	11 miles	0.4 mile
Glendale	30.6	1,100	Unknown	Unknown
Inglewood	9	1,157	12 miles	Unknown
Pasadena	26	1,050	30	Unknown
Santa Monica	8.3	850	Unknown	Unknown
Torrance	20	2,000	20 miles	3 miles
TOTAL		<u>approx. 109,473</u>	<u>approx. 4,323</u>	<u>approx. 484.4</u>

Unlike other Permittees, the LACFCD does not own or operate any municipal sanitary sewer systems, public streets, roads, or highways, and has no planning, zoning, development permitting or other land use authority over industrial or commercial facilities, new developments or re-development projects, or development construction sites located in any incorporated or unincorporated areas within its service area. However, The the Los Angeles County Flood Control District also owns the County of Los Angeles Department of Public Works headquarters building and Los Angeles County Flood Control District maintenance yards to support its field operations.

Storm water and non-storm water are conveyed through the MS4s and ultimately discharged into receiving waters of the Los Angeles Region. ~~The Los Angeles County Flood Control District's MS4s subject to this Order~~ infrastructure receives storm water and non-storm water flows from various sources. These flows come from MS4s owned by the other Permittees covered by this Order and other public agencies ~~that connect to the Los Angeles County Flood Control District's infrastructure,~~ NPDES permitted discharges, discharges authorized by the USEPA (including discharges subject to a

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decision document approved pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)), groundwater, and natural flows.

~~The Los Angeles County Flood Control District owns its headquarters building located at 900 South Fremont Avenue in the City of Alhambra, California. The facility includes a fueling station and a wash rack that discharges to the sanitary sewer. The wash rack is used to wash Department of Public Works vehicles. The Los Angeles County Flood Control District also operates 12 flood maintenance yards. Materials and equipment associated with maintaining the flood control facilities are stored at the yards.~~

The requirements contained in this Order apply to the Los Angeles County Flood Control District, 84 cities within the Los Angeles County Flood Control District coastal watersheds of Los Angeles County, and the unincorporated areas of Los Angeles County under County jurisdiction, with the exception of the City of Long Beach. Under the previous Order, Order No. 01-182, the Los Angeles County Flood Control District was designated the Principal Permittee, and the County of Los Angeles and the 84 incorporated cities were designated co-Permittees. However, in this Order, the role of Principal Permittee has been eliminated. This Order divides Los Angeles County into seven Watershed Management Areas (WMAs).

B. The Need to Regulate Discharges from MS4s

The quality of storm water and non-storm water discharges from MS4s is fundamentally important to the health of the environment and the quality of life in Southern California. Polluted storm water and non-storm water discharges from MS4s are a leading cause of water quality impairment in the Los Angeles Region. Storm water and non-storm water discharges are often contaminated with pesticides, fertilizers, fecal indicator bacteria and associated pathogens, trash, automotive byproducts, and many other toxic substances generated by activities in the urban environment. Water that flows over streets, parking lots, construction sites, and industrial, commercial, residential, and municipal areas carries these untreated pollutants through the MS4 directly into the receiving waters of the Region. The water quality impacts, ecosystem impacts, and increased public health risks from MS4 discharges that affect receiving waters nationwide and throughout Los Angeles County, including its coastline, are well documented.

The National Urban Runoff Program (NURP) Study (USEPA 1983) showed that MS4 discharges draining from residential, commercial, and light industrial areas contain significant loadings of total suspended solids and other pollutants. Many studies continue to support the conclusions of the NURP Study. The NURP Study also found that pollutant levels from illicit discharges were high enough to significantly degrade receiving water quality, and threaten aquatic life, wildlife, and human health. The general findings and conclusions of the NURP Study are reiterated in the more recent 2008 National Research Council report "Urban Runoff Management in the United States" as well as in a regional study, "Sources, Patterns and Mechanisms of storm Water Pollutant Loading from Watersheds and Land Uses of the Greater Los Angeles Area, California," SCCWRP Technical Report 510 (2007), funded in large part by the Regional Water Board.

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Some of the conclusions of the 2007 regional study were as follows.

Storm water runoff from watershed and land use based sources is a significant contributor of pollutant loading and often exceeds water quality standards. High pollutant concentrations were observed throughout the study at both mass emission (ME) and land use (LU) sites. Pollutant concentrations frequently exceeded water quality standards.

Storm water Event Mean Concentrations (EMCs), fluxes and loads were substantially lower from undeveloped open space areas when compared to developed urbanized watersheds. Storms sampled from less developed watersheds produced pollutant EMCs and fluxes that were one to two orders of magnitude lower than comparably sized storms in urbanized watersheds. Furthermore, the higher fluxes from developed watersheds were generated by substantially less rainfall than the lower fluxes from the undeveloped watersheds, presumably due to increased impervious surface area in developed watersheds.

The Los Angeles region contributed a similar range of storm water runoff pollutant loads as that of other regions of the United States. Comparison of constituent concentrations in storm water runoff from land use sites from this study reveal median EMCs that are comparable to U.S. averages reported in the National Storm water Quality Database (NSQD; Pitt et al., 2003). Comparison to the NSQD data set provides insight to spatial and temporal patterns in constituent concentrations in urban systems. Similarities between levels reported in the NSQD and this study suggest that land-based concentrations in southern California storm water are generally comparable to those in other parts of the country.

Peak concentrations for all constituents were observed during the early part of the storm. Constituent concentrations varied with time over the course of storm events. For all storms sampled, the highest constituent concentrations occurred during the early phases of storm water runoff with peak concentrations usually preceding peak flow. Although the pattern of an early peak in concentration was comparable in both large and small developed watersheds, the peak concentration tended to occur later in the storm and persist for a longer duration in the smaller developed watersheds. Therefore monitoring programs must capture the early portion of storms and account for intra-storm variability in concentration in order to generate accurate estimates of EMC and contaminant loading. Programs that do not initiate sampling until a flow threshold has been surpassed may severely underestimate storm EMCs.

Highest constituent loading was observed early in the storm season with intra-annual variability driven more by antecedent dry period than amount of rainfall. Seasonal differences in constituent EMCs and loads were consistently observed at both ME and LU sites. In general, early season storms (October – December) produce significantly higher constituent EMCs and loads than late season storms (April-May), even when rainfall quantity was similar. This suggests that the magnitude of constituent load associated with storm water runoff depends, at least in part, on the amount of time available for pollutant build-up on land surfaces. The extended dry period that typically

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occurs in arid climates such as southern California maximizes the time for constituents to build-up on land surfaces, resulting in proportionally higher concentrations and loads during initial storms of the season.

The 1992, 1994, and 1996 National Water Quality Inventory Reports to Congress prepared by USEPA showed a trend of impairment in the Nation's waters from contaminated storm water and dry weather urban runoff. The 2004 National Water Quality Inventory (305(b) Report) showed that urban runoff/storm water discharges contribute to the impairment of 22,559 miles of streams, the impairment of 701,024 acres of lakes, and the impairment of 867 square miles of estuaries in the United States. The Natural Resources Defense Council (NRDC) 1999 Report, "Stormwater Strategies, Community Responses to Runoff Pollution" identifies two main causes of the storm water pollution problem in urban areas. Both causes are directly related to development in urban and urbanizing areas:

Increased volume and velocity of surface runoff. There are three types of human-made impervious covers that increase the volume and velocity of runoff: (i) rooftop, (ii) transportation imperviousness, and (iii) non-porous (impervious) surfaces. As these impervious surfaces increase, infiltration will decrease, forcing more water to run off the surface, picking up speed and pollutants.

The concentration of pollutants in the runoff. Certain activities, such as those from industrial sites, are large contributors of pollutant concentrations to the MS4. The report also identified several activities causing storm water pollution from urban areas, including practices of homeowners, businesses, and government agencies. Studies conducted by the United States Geological Survey (USGS) confirm the link between urbanization and water quality impairments in urban watersheds due to contaminated storm water runoff.

Furthermore, the water quality impacts of urbanization and urban storm water discharges have been summarized by several other recent USEPA reports. Urbanization causes changes in hydrology and increases pollutant loads which adversely impact water quality and impair the beneficial uses of receiving waters. Increases in population density and imperviousness result in changes to stream hydrology including:

- increased peak discharges compared to predevelopment levels;
- increased volume of storm water runoff with each storm compared to pre-development levels;
- decreased travel time to reach receiving water;
- increased frequency and severity of floods;
- reduced stream flow during prolonged periods of dry weather due to reduced levels of infiltration;
- increased runoff velocity during storms due to a combination of effects of higher discharge peaks, rapid time of concentration, and smoother hydraulic surfaces from channelization; and
- decreased infiltration and diminished groundwater recharge.

The Los Angeles County MS4 program has conducted monitoring to:

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- quantify mass emissions for pollutants;
- identify critical sources for pollutants of concern in storm water;
- evaluate BMP effectiveness; and
- evaluate receiving water impacts, including impacts to tributaries.

The monitoring indicates that instream concentrations of pathogen indicators (fecal coliform and streptococcus), heavy metals (such as Pb, Cu, Zn) and pesticides (such as diazinon) exceed water quality standards. The mass emissions of pollutants to the ocean are significant from the urban WMAs such as the Los Angeles River WMA, Ballona Creek WMA, and Coyote Creek WMA, with the Los Angeles River WMA providing more than seventy percent of the loadings. Critical source data for facilities (such as auto-salvage yards, primary metal facilities, and automotive repair shops) show that total and dissolved heavy metals (Pb, Cu, Zn, and Cd), and total suspended solids (TSS) exceeded water quality standards by as much as two orders of magnitude. The results are consistent with a limited term study conducted by the Regional Water Board to characterize storm water runoff in the Los Angeles region in 1988 before the issuance of first MS4 permit. Storm water runoff data from predominant land uses in Los Angeles County showed similar patterns. Light industrial, commercial and transportation land uses showed the highest range of exceedances. A pesticide (diazinon) was detected in higher concentrations from residential land use. The data for polycyclic aromatic hydrocarbons (PAHs), a known pollutant of concern in urban storm water runoff, is inconclusive but improved analytical methods may yield more definitive results in the future. Receiving water impacts studies found that storm water discharges from urban watersheds exhibit toxicity attributable to heavy metals. Bioassessments of the benthic communities showed bioaccumulation of toxicants. Sediment analysis showed higher concentrations of pollutants, such as Pb and PAHs, in urban watersheds than in rural watersheds (2 to 4 times higher). In addition, toxicity of dry weather flows was observed with the cause of toxicity undetermined. Other studies have documented concentrations of pollutants that exceed water quality standards in storm drains flowing to the ocean during dry weather, and adverse health impacts from swimming near flowing storm drains.

Trash is also a serious and pervasive water quality problem in Los Angeles County. The Regional Water Board has determined that current levels of trash exceed the existing water quality objectives contained in the Basin Plan that are necessary to protect the beneficial uses of many surface waters. Regional Water Board staff regularly observes trash in surface waters throughout the Los Angeles region. Non-profit organizations such as Heal the Bay, Friends of the Los Angeles River (FoLAR) and others organize volunteer clean-ups periodically, and document the amount of trash collected. Trash in waterways causes significant water quality problems. Small and large floatables inhibit the growth of aquatic vegetation, decreasing habitat and spawning areas for fish and other living organisms. Wildlife living in rivers and in riparian areas can be harmed by ingesting or becoming entangled in floating trash. Except for large items, settleables are not always obvious to the eye. They include glass, cigarette butts, rubber, and construction debris, among other things. Settleables can be a problem for bottom feeders and can contribute to sediment contamination. Some debris (e.g. diapers, medical and household waste, and chemicals) are a source of bacteria and toxic

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substances. Floating debris that is not trapped and removed will eventually end up on the beaches or in the open ocean, keeping visitors away from our beaches and degrading coastal waters. Significant strides have been made by a number of Permittees in addressing this problem through the implementation of control measures to achieve wasteload allocations established in trash TMDLs.

C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data

The Los Angeles County MS4 Permit was last reissued in 2001 as Order No.01-182. Order No. 01-182 expired in 2006, but has been administratively extended pursuant to federal regulations. Order No. 01-182 was reopened by the Regional Water Board in 2006, 2007 and 2009 to incorporate provisions to implement three TMDLs. It was further amended in 2010 and 2011 pursuant to a peremptory writ of mandate issued by the Los Angeles County Superior Court.

Order No. 01-182 is organized under the following seven parts and includes several attachments. The description below summarizes key permit parts and attachments in Order No. 01-182:

Part 1 – Discharge Prohibitions

As required by section 402(p)(3)(B)(ii) of the Clean Water Act, Part 1 requires permittees to “effectively prohibit non-storm water discharges into the MS4 and watercourses, except where such discharges” are covered by a separate NPDES permit or fall within one of thirteen categories of flows that are conditionally exempted from the discharge prohibition. These exempted flows fall under the general categories of natural flows, fire fighting flows, and flows incidental to urban activities (i.e. landscape irrigation, sidewalk rinsing). These non-storm water flows may be exempted so long as: (i) they are not a source of pollutants, (ii) their effective prohibition is not necessary to comply with TMDL provisions, and (iii) they do not violate antidegradation policies. Part 1 also authorizes the Regional Water Board Executive Officer to impose conditions on these types of discharges and to add or remove categories of conditionally exempted non-storm water discharges based on their potential to contribute pollutants to receiving waters.

Part 2 – Receiving Water Limitations

Part 2 prohibits discharges from the MS4 that cause or contribute to the violation of water quality standards. In addition, discharges from the MS4 of storm water or non-storm water, for which a Permittee is responsible, may not cause or contribute to a condition of nuisance. Part 2.3 states that permittees shall comply with these prohibitions “through timely implementation of control measures and other actions to reduce pollutants in the discharges in accordance with [the Los Angeles Stormwater Quality Management Program (SQMP)] and its components and other requirements of [the LA County MS4 Permit].” Part 2.3 establishes an “iterative process” whereby certain actions are required when exceedances of water quality standards or objectives occur. This iterative process includes submitting a Receiving Water Limitations Compliance Report; revising the SQMP and its components to include modified BMPs, an implementation schedule and additional monitoring to address the exceedances; and

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implementing the revised SQMP. These provisions are consistent with the receiving water limitations language required by State Water Board Order WQ 99-05.

Part 2 also includes provisions implementing the Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL (summer dry weather provisions only). During summer dry weather, Part 2.6 prohibits discharges of bacteria from MS4s into Marina del Rey Harbor Basins D, E, or F, including Mothers' Beach that cause or contribute to exceedance of the applicable bacteria water quality objectives.

Part 2 also included similar TMDL provisions relating to the Santa Monica Bay summer dry weather bacteria TMDL. However, as a result of a legal challenge by Los Angeles County and the LACFCD, the Regional Water Board was required to void and set aside those provisions, which the Regional Water Board did in 2011.

Part 3 – Stormwater Quality Management Program (SQMP) Implementation

Under Part 3, each Permittee shall, at a minimum, implement the SQMP, which is an enforceable element of the Los Angeles County MS4 Permit. The SQMP, at a minimum, shall also comply with the applicable storm water program requirements of 40 CFR section 122.26(d)(2). The SQMP and its components shall be implemented so as to reduce the discharges of pollutants in storm water to the maximum extent practicable (MEP) and effectively prohibit non-storm water discharges to the MS4. Each Permittee shall also implement additional controls, where necessary, to reduce the discharge of pollutants from the MS4.

Part 3 also sets forth specific responsibilities of the Principal Permittee, which under Order No. 01-182 is the LACFCD, and co-permittees. In addition, Part 3 sets forth requirements for Watershed Management Committees (WMCs) which, among other tasks, prioritize pollution control efforts and evaluate the effectiveness of and recommend changes to the SQMP and its components. Each Permittee must also have the necessary legal authority to prohibit non-storm water discharges to the MS4, as well as possess adequate legal authority to develop and enforce storm water and non-storm water ordinances for its jurisdiction.

Part 4 – Special Provisions

Part 4 sets forth provisions for public information and participation, industrial/commercial facilities control program, development planning, development construction, public agency activities, and illicit connections and illicit discharges elimination. These programs are termed "minimum control measures" and have been in place since the inception of the MS4 NPDES permitting program, as required by federal regulations.

Part 5 – Definitions

Part 5 includes definitions for terms used within Order No. 01-182.

Part 6 – Standard Provisions

Part 6 includes standard provisions relating to implementation of the programs required by the permit. Such provisions include, but are not limited to, the duty to comply, the duty to mitigate, inspection and entry requirements, proper operation and maintenance requirements, monitoring and reporting requirements, and the duty to provide

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information. Most of these provisions are required by 40 CFR sections 122.41 or 122.42 and apply to all NPDES permits.

Part 7 – TMDL Provisions

In 2009, Order No. 01-182 was amended to include provisions that are consistent with the assumptions and requirements of waste load allocations from the Los Angeles River Trash TMDL. Appendix 7-1 identifies the permittees subject to the Los Angeles River Trash TMDL and sets forth the interim and final numeric effluent limitations for trash that the permittees must comply with. Part 7 also sets forth how permittees can demonstrate compliance with the numeric effluent limitations. Permittees have the option to employ three general compliance strategies to achieve the numeric effluent limitations. Depending on the strategy selected, the Permittee may demonstrate compliance either by documenting the percentage of its area addressed by full capture systems (“action-based” demonstration) or by calculating its annual trash discharge to the MS4 and comparing that to its effluent limitation. This approach allows the Permittee the flexibility to comply with the numeric effluent limitations using any lawful means, and establishes appropriate and enforceable compliance metrics depending on the method of compliance and level of assurance provided by the Permittee that the selected method will achieve the numeric effluent limitations derived from the TMDL WLAs.

Attachment U – Monitoring and Reporting Program

Order No. 01-182 has both self-monitoring and public reporting requirements, which include: (1) monitoring of “mass emissions” at seven mass emission monitoring stations; (2) Water Column Toxicity Monitoring; (3) Tributary Monitoring; (4) Shoreline Monitoring; (5) Trash Monitoring; (6) Estuary Sampling; (7) Bioassessment; and (8) Special Studies. The purpose of mass emissions monitoring is to: (1) estimate the mass emissions from the MS4; (2) assess trends in the mass emissions over time; and (3) determine if the MS4 is contributing to exceedances of water quality standards by comparing results to the applicable standards in the Basin Plan. Order No. 01-182 established that the Principal Permittee shall monitor the mass emissions stations. The permit required mass emission sampling five times per year.

III. APPLICABLE STATUTES, REGULATIONS, PLANS, AND POLICIES

The provisions contained in this Order are based on the requirements and authorities described below.

A. Legal Authorities – Federal Clean Water Act and California Water Code

This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It serves as an NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260).

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B. Federal and California Endangered Species Acts

This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code, §§ 2050 to 2115.5) or the Federal Endangered Species Act (16 U.S.C.A., §§ 1531 to 1544). This Order requires compliance with requirements to protect the beneficial uses of waters of the United States. Permittees are responsible for meeting all requirements of the applicable Endangered Species Act.

C. California Environmental Quality Act (CEQA)

This action to adopt an NPDES Permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA) (Public Resources Code, § 21100, et seq.) pursuant to California Water Code section 13389. (*County of Los Angeles v. Cal. Water Boards* (2006) 143 Cal.App.4th 985.)

D. State and Federal Regulations, Policies, and Plans

1. Water Quality Control Plans. The CWA requires the Regional Water Board to establish water quality standards for each water body in its region. Water quality standards include beneficial uses, water quality objectives and criteria that are established at levels sufficient to protect those beneficial uses, and an antidegradation policy to prevent degrading waters. On June 13, 1994, the Regional Water Board adopted a *Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (hereinafter Basin Plan). The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters in the Los Angeles Region. The Regional Water Board has amended the Basin Plan on multiple occasions since 1994. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to the surface water bodies that receive discharges from the Los Angeles County MS4 generally include those listed below:

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Table F-3. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
<p>All Municipal Separate Storm Sewer Systems (MS4s) discharge points within the Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the Los Angeles County Flood Control District with the exception of the City of Long Beach</p>	<p>Multiple surface water bodies of the Los Angeles Region</p>	<p>Municipal and Domestic Supply (MUN); Agricultural Supply (AGR); Industrial Service Supply (IND); Industrial Process Supply (PROC); Ground Water Recharge (GWR); Freshwater Replenishment (FRSH); Navigation (NAV); Hydropower Generation (POW); Water Contact Recreation (REC-1); Limited Contact Recreation (LREC-1); Non-Contact Water Recreation (REC-2); Commercial and Sport Fishing (COMM); Warm Freshwater Habitat (WARM); Cold Freshwater Habitat (COLD); Preservation of Areas of Special Biological Significance (BIOL); Wildlife Habitat (WILD); Preservation of Rare and Endangered Species (RARE); Marine Habitat (MAR); Wetland Habitat (WET); Migration of Aquatic Organisms (MIGR); Spawning, Reproduction, and/or Early Development (SPWN); Shellfish Harvesting (SHELL)</p>

Pursuant to California Water Code sections 13263(a) and 13377, the requirements of this Order implement the Basin Plan.

a. Permit Structure: Watershed Management Approach and Total Maximum Daily Load (TMDL) Implementation

One of the fundamental issues for this Order was a reconsideration of the basic permit structure. The previous Order, Order No. 01-182, was structured as a single permit whereby all 86 Permittees were assigned uniform requirements, with additional requirements for the Principal Permittee. Through Order No. 01-182, the Regional Water Board began to implement a Watershed Management Approach to address water quality protection in the region. The Watershed Management Approach intended to provide a comprehensive and integrated strategy toward water resource protection, enhancement, and restoration while considering economic and environmental impacts within a hydrologically defined drainage basin or watershed.

On June 12, 2006, prior to the expiration date of Order No. 01-182, all of the Permittees filed Reports of Waste Discharge (ROWD) applying for renewal of their waste discharge requirements. Specifically, the Los Angeles County Flood Control District submitted an ROWD application on behalf of itself, the County of Los Angeles, and 78 other Permittees. Several Permittees under Order No. 01-182 elected to not be included as part of the Los Angeles County Flood Control District’s ROWD. On June 12, 2006, the cities of Downey and Signal Hill each submitted an individual ROWD application requesting an individual MS4 permit; and the Upper San Gabriel River Watershed Coalition (comprised of the cities of Azusa, Claremont, Glendora, Irwindale, and Whittier) also submitted an individual ROWD application requesting a separate MS4 permit for these cities. In 2010, the LACFCD withdrew from its 2006 ROWD and submitted a new ROWD also

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requesting an individual MS4 permit. The LACFCD also requested that if an individual MS4 permit was not issued to it, that it no longer be designated as the Principal Permittee and that it is relieved of Principal Permittee responsibilities.

The Regional Water Board evaluated each of the 2006 ROWDs and notified all of the Permittees that their ROWDs did not satisfy federal storm water regulations contained in the USEPA Interpretive Policy Memorandum on Reapplication Requirements for Municipal Separate Storm Sewer Systems; Final Rule, August 9, 1996 (61 *Fed Reg.* 41697). The Regional Water Board also found that the information presented in the ROWDs did not reflect the current status of program elements for MS4 permits developed over the past decade or the new information specific to this MS4. Because each ROWD did not satisfy federal requirements, the Regional Water Board deemed all four 2006 ROWDs incomplete. The Regional Water Board also evaluated the LACFCD's 2010 ROWD and found that it too did not satisfy federal requirements nor reflect the current status for MS4s.

Though five separate ROWDs were submitted, the Regional Water Board retains the discretion as the permitting authority to determine whether to issue permits for discharges from MS4s on a system-wide or jurisdiction-wide basis. Clean Water Act section 402(p)(3)(B)(i) and implementing regulations at 40 CFR section 122.26, subdivisions (a)(1)(v), ~~and (a)(3)(ii), and (a)(3)(iv)~~ allow the permitting authority to issue permits for MS4 discharges on a system-wide or jurisdiction-wide basis taking into consideration a variety of factors. Such factors include the location of the discharge with respect to waters of the United States, the size of the discharge, the quantity and nature of the pollutants discharged to waters of the United States, and other relevant factors. Federal regulations at 40 CFR section 122.26(a)(3)(ii) identify a variety of possible permitting structures, including one system-wide permit covering all MS4 discharges or distinct permits for appropriate categories of MS4 discharges including, but not limited to, all discharges owned or operated by the same municipality, located within the same jurisdiction, all discharges within a system that discharge to the same watershed, discharges within a MS4 that are similar in nature, or for individual discharges from MS4s.

In evaluating the five separate ROWDs and the structure for this Order, the Regional Water Board considered a number of factors:

- i. The nature of the ~~Los Angeles County Permittees'~~ MS4s, which ~~is~~ comprise a large interconnected system, controlled in large part by the Los Angeles County Flood Control District, among others, and used by multiple cities along with Los Angeles County. The discharges from these entities frequently commingle in the MS4 prior to discharge to receiving waters.
- ii. The requirement to implement 33 largely watershed-based TMDLs in this Order. A number of Permittees have already established jurisdictional groups on a watershed or subwatershed basis for TMDL implementation. (See Attachment K of this Order for a matrix of these TMDLs and Permittees by

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Watershed Management Area (WMA)). Many of the TMDLs apply to multiple watersheds and the jurisdictional areas of multiple Permittees. Having separate permits would make implementation of the TMDLs more cumbersome.

- iii. The passage of Assembly Bill 2554 in 2010, which amended the Los Angeles County Flood Control Act. This statute allows the LACFCD to assess a ~~parcel property-related fee or charge~~^{tax} for storm water and clean water programs. Funding is subject to voter approval in accordance with Proposition 218. Fifty percent of funding is allocated to nine “watershed authority groups” to implement collaborative water quality improvement plans. (See Attachments B and C of this Order for maps of WMAs.)
- iv. Results of the on-line survey administered to Permittees by Regional Water Board staff regarding permit structure. The results indicated that a majority of Permittees support a single MS4 permit for Los Angeles County. A significant minority support multiple watershed-based permits. Overall, 85 percent of the permittees that responded to the on-line survey support either a single MS4 permit or several individual watershed-based permits. A small number of permittees support alternative groupings of adjacent municipalities instead of watershed-based groupings. Only four permittees expressed a preference for individual MS4 permits.
- v. The 2006 and 2010 ROWDs. Eight Permittees submitted individual or small group ROWDs, including the cities of Signal Hill and Downey; five cities in the upper San Gabriel River watershed; and the Los Angeles County Flood Control District. The LACFCD has also requested that ~~if the Regional Water Board does not issue an individual permit to the LACFCD,~~ that it is no longer designated as Principal Permittee and relieved of Principal Permittee responsibilities.

Based on an evaluation of these factors, the Regional Water Board again determined that, because of the complexity and networking of the MS4 within Los Angeles County, that one system-wide permit is appropriate. In order to provide individual Permittees with more specific requirements, this Order regulates the MS4 discharges of 86 Permittees with some sections devoted to universal requirements for all Permittees and others devoted to requirements specific to each Watershed Management Area (WMA), including TMDL implementation provisions. This structure is supported by section 402(p) of the Clean Water Act and 40 CFR sections 122.26, subdivisions (a)(1)(v), ~~and (a)(3)(ii), and (a)(3)(iv).~~ A single permit will ensure consistency and equitability in regulatory requirements within Los Angeles County, while watershed-based sections within the single permit will provide flexibility to tailor permit provisions to address distinct watershed characteristics and water quality issues. Additionally, an internal watershed-based structure comports with the Regional Water Board’s Watershed Management Initiative, its watershed-based TMDL requirements, and the LACFCD’s funding initiative passed in Assembly Bill 2554. Watershed-based sections will help promote watershed-wide solutions to address water quality problems, which in many cases are the most efficient and cost-effective means to

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address storm water and urban runoff pollution. Further, watershed-based sections may encourage collaboration among permittees to implement regional integrated water resources approaches such as storm water capture and re-use to achieve multiple benefits.

The Regional Water Board determined that the cities of Signal Hill and Downey, the five upper San Gabriel River cities, and the LACFCD are included as Permittees in this Order. Individually tailored permittee requirements are provided in this Order, where appropriate. The Regional Water Board also determined that because the LACFCD owns and operates large portions of the MS4 infrastructure, including but not limited to catch basins, storm drains, outfalls and open channels, in each coastal watershed management area within Los Angeles County, as the primary owner and operator of the Los Angeles County MS4, the LACFCD should remain a Permittee in the single-system wide permit; however, this Order relieves LACFCD of its role and responsibilities as Principal Permittee. This Order also specifies certain requirements specific to the LACFCD in its role as the owner and operator of the large portions majority of the Los Angeles County MS4s within all the coastal watersheds within Los Angeles County.

2. **Ocean Plan.** In 1972, the State Water Board adopted the Water Quality Control Plan for Ocean Waters of California, California Ocean Plan (hereinafter Ocean Plan). The State Water Board adopted the most recent amended Ocean Plan on September 15, 2009. The Office of Administration Law approved it on March 10, 2010. On October 8, 2010, USEPA approved the 2009 Ocean Plan. The Ocean Plan is applicable, in its entirety, to ocean waters of the State. In order to protect beneficial uses, the Ocean Plan establishes water quality objectives and a program of implementation. Pursuant to California Water Code sections 13263(a) and 13377, the requirements of this Order implement the Ocean Plan. The Ocean Plan identifies beneficial uses of ocean waters of the State to be protected as summarized below:

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Table F-43B. Ocean Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
<p>All Municipal Separate Storm Sewer Systems (MS4s) discharge points within the Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the Los Angeles County Flood Control District with the exception of the City of Long Beach</p>	<p>Pacific Ocean</p>	<p>Industrial Water Supply (IND); Water Contact (REC-1) and Non-Contact Recreation (REC-2), including aesthetic enjoyment; Navigation (NAV); Commercial and Sport Fishing (COMM); Mariculture; Preservation and Enhancement of Designated Areas of Special Biological Significance (ASBS); Rare and Endangered Species (RARE); Marine Habitat (MAR); Fish Migration (MIGR); Fish Spawning (SPWN) and Shellfish Harvesting (SHELL)</p>

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3. Antidegradation Policy. 40 CFR section 131.12⁴ requires that the state water quality standards include an antidegradation policy consistent with the federal antidegradation policy. The State Water Board established California’s antidegradation policy in State Water Board Resolution No. 68-16 (“Statement of Policy with Respect to Maintaining the Quality of the Waters of the State”). Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. The Regional Water Board’s Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. Resolution No. 68-16 and 40 CFR section 131.12 require the Regional Water Board to maintain high quality waters of the State until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in the Regional Water Board’s policies. Resolution 68-16 requires that discharges of waste be regulated to meet best practicable treatment or control to assure that pollution or nuisance will not occur and the highest water quality consistent with the maximum benefit to the people of the State be maintained.

The discharges permitted in this Order are consistent with the antidegradation provisions of 40 CFR section 131.12 and Resolution 68-16. Many of the water bodies within the area covered by this Order are of high quality. The Order requires the Permittees to meet best practicable treatment or control to meet water quality standards. As required by 40 CFR section 122.44(a), the Permittees must comply with the “maximum extent practicable” technology-based standard set forth in CWA

⁴ All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

section 402(p). Many of the waters within the area covered by this Order are impaired and listed on the State's CWA Section 303(d) List and either the Regional Water Board or USEPA has established TMDLs to address the impairments. This Order requires the Permittees to comply with permit provisions to implement the WLAs set forth in the TMDLs in order to restore the beneficial uses of the impaired water bodies consistent with the assumptions and requirements of the TMDLs. This Order includes requirements to develop and implement storm water management programs, achieve water quality-based effluent limitations, and effectively prohibit non-storm water discharges through the MS4.

The issuance of this Order does not authorize an increase in the amount of discharge of waste. The Order ~~includes new is more stringent than the previous Order because it includes~~ requirements to implement WLAs assigned to Los Angeles County MS4 discharges that have been established in 33 TMDLs, most of which were not included in the previous Order.

- 4. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations ~~or other conditions~~ in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations ~~or conditions~~ may be relaxed. All effluent limitations ~~and other conditions (including BMPs and e.g. storm water management program minimum control measures, monitoring) and other conditions~~ in this Order are at least as stringent as the effluent limitations ~~and conditions~~ in the previous permit.

E. Impaired Water Bodies on CWA section 303(d) List

Section 303(d)(1) of the CWA requires each state to identify specific water bodies within its boundaries where water quality standards are not being met or are not expected to be met after implementation of technology-based effluent limitations on point sources. Water bodies that do not meet water quality standards are considered impaired and are placed on the state's "303(d) List". Periodically, USEPA approves the State's 303(d) List. Most recently, USEPA approved the State's 2010 303(d) List of impaired water bodies on October 11, 2011, which includes certain receiving waters in the Los Angeles region. For each listed water body, the state or USEPA is required to establish a total maximum daily load (TMDL) of each pollutant impairing the water quality standards in that water body. A TMDL is a tool for implementing water quality standards and is based on the relationship between pollution sources and in-stream water quality conditions. The TMDL establishes the allowable pollutant loadings for a water body and thereby provides the basis to establish water quality-based controls. These controls should provide the pollution reduction necessary for a water body to meet water quality standards. A TMDL is the sum of the allowable pollutant loads of a single pollutant from all contributing point sources (the waste load allocations or WLAs) and non-point sources (load allocations or LAs), plus the contribution from background sources and a margin of safety. (40 CFR section 130.2(i).) MS4 discharges are considered point source discharges. For 303(d)-listed water bodies and pollutants in the Los Angeles

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Region, the Regional Water Board or USEPA develops and adopts TMDLs that specify these requirements.

Over the last decade, the Regional Water Board and USEPA have established 33 TMDLs to remedy water quality impairments in various water bodies within Los Angeles County. (See Attachment K of this Order for a list of TMDLs by Watershed Management Area for Los Angeles County.) These TMDLs identify MS4 discharges as a source of pollutants to these water bodies and, as required, establish WLAs for MS4 discharges to reduce the amount of pollutants discharged to receiving waters. Section 402(p)(3)(B)(iii) of the Clean Water Act requires the Regional Water Board to impose permit conditions, including: “management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator of the State determines appropriate for the control of such pollutants.” (emphasis added.) Section 402(a)(1) of the Clean Water Act also requires states to issue permits with conditions necessary to carry out the provisions of the Clean Water Act. Federal regulations also require that NPDES permits contain effluent limits consistent with the assumptions and requirements of all available WLAs (40 CFR § 122.44(d)(1)(vii)(B)). California Water Code section 13377 also requires that NPDES permits include limitations necessary to implement water quality control plans. Therefore, this Order includes effluent limitations and other provisions to implement the TMDL WLAs assigned to permittees regulated by the LA County MS4 Permit.

The Regional Water Board has previously established numeric effluent limitations to implement TMDL WLAs when it reopened Order No. 01-182 in 2009 to incorporate permit provisions to implement the Los Angeles River Watershed Trash TMDL WLAs. In that case, Permittees have the option to employ three general compliance strategies to achieve the numeric effluent limitations. Depending on the strategy selected, the Permittee may demonstrate compliance either by documenting the percentage of its area addressed by full capture systems (“action-based” demonstration) or by calculating its annual trash discharge to the MS4 and comparing that to its effluent limitation. This approach allows the Permittee the flexibility to comply with the numeric effluent limitations using any lawful means, and establishes appropriate and enforceable compliance metrics depending on the method of compliance and level of assurance provided by the Permittee that the selected method will achieve the numeric effluent limitations derived from the TMDL WLAs. A similar approach is used for the 32 other TMDLs incorporated into this Order, where appropriate.

F. Other Plans, Policies and Regulations

This Order implements all other applicable federal regulations and State plans, policies and regulations, including the California Toxics Rule at 40 CFR section 131.38.

IV. RATIONALE FOR DISCHARGE SPECIFICATIONS

A. Discharge Prohibitions – Non-Storm Water Discharges

1. Regulatory Background

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The CWA employs the strategy of prohibiting the discharge of any pollutant from a point source into waters of the United States unless the discharger of the pollutant(s) obtains an NPDES permit pursuant to CWA section 402. The 1987 amendment to the CWA included section 402(p) that specifically addresses NPDES permitting requirements for municipal discharges from MS4s. Section 402(p) prohibits the discharge of pollutants from specified MS4s to waters of the United States except as authorized by an NPDES permit and identifies the substantive standards for MS4 permits. MS4 permits (1) “shall include a requirement to effectively prohibit non-stormwater discharges into the storm sewers[]” and (2) “shall require [i] controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and [ii] such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.” (CWA § 402(p)(3)(B)(ii-iii).)

On November 16, 1990, USEPA published regulations to implement the 1987 amendments to the CWA. (55 Fed.–Reg. 47990 et seq. (Nov. 16, 1990)). The regulations establish minimum requirements for MS4 permits. The regulations address both storm water and non-storm water discharges from MS4s; however, the minimum requirements for each are significantly different. This is evident from USEPA’s preamble to the storm water regulations, which states that “Section 402(p)(B)(3) [of the CWA] requires that permits for discharges from municipal separate storm sewers require the municipality to “effectively prohibit” non-storm water discharges from the municipal storm sewer ... Ultimately, such non-storm water discharges through a municipal separate storm sewer system must either be removed from the system or become subject to an NPDES permit.” (55 Fed.–Reg. 47990, 47995 (Nov. 16, 1990)).⁵ USEPA states that MS4 Permittees are to begin to fulfill the “effective prohibition of non-storm water discharges” requirement by: (1) conducting a screening analysis of the MS4 to provide information to develop priorities for a program to detect and remove illicit discharges, (2) implementing a program to detect and remove illicit discharges, or ensure they are covered by a separate NPDES permit, and (3) to control improper disposal into the storm sewer. (40 CFR § 122.26(d)(2)(iv)(B).) These non-storm water discharges therefore are not subject to the MEP standard.

“Illicit discharges” defined in the regulations is the most closely applicable definition of “non-storm water” contained in federal law and the terms are often used interchangeably. In fact, “illicit discharge” is defined by USEPA in its 1990 rulemaking, as “any discharge through a municipal separate storm sewer that is not composed entirely of storm water and that is not covered by an NPDES permit [other than the permit for the discharge from the MS4].” (55 Fed.–Reg. 47990, 47995).

2. Definition of Storm Water and Non-Storm Water

Federal regulations define “storm water” as “storm water runoff, snow melt runoff, and surface runoff and drainage.” (40 C.F.R. § 122.26(b)(13).) While “surface runoff

⁵ USEPA further states that, “[p]ermits for such [non-storm water] discharges must meet applicable technology-based and water-quality based requirements of Sections 402 and 301 of the CWA.” (55 Fed. Reg. 47990, 48037 (Nov. 16, 1990)).

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and drainage” is not defined in federal law, USEPA’s preamble to the federal regulations demonstrates that the term is related to precipitation events such as rain and/or snowmelt. (55 Fed.–Reg. 47990, 47995-96 (Nov. 16, 1990)). For example, USEPA states:

“In response to the comments [on the proposed rule] which requested EPA to define the term ‘storm water’ broadly to include a number of classes of discharges which are not in any way related to precipitation events, EPA believes that this rulemaking is not an appropriate forum for addressing the appropriate regulation under the NPDES program of such non-storm water discharges Consequently, the final definition of storm water has not been expanded from what was proposed.”

(*Ibid.*) The storm water regulations themselves identify numerous categories of discharges including landscape irrigation, diverted stream flows, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, and street wash water as “non-storm water.” While these types of discharges may be regulated under storm water permits, they are not considered storm water discharges. (40 CFR § 122.26(d)(2)(iv)(B)). USEPA states that, “in general, municipalities will not be held responsible for prohibiting some specific components of discharges or flows ... through their municipal separate storm sewer system, *even though such components may be considered non-storm water discharges...*” (emphasis added). However, where certain categories of non-storm water discharges are identified by the Permittee (or the Regional Water Board) as needing to be addressed, they are no longer exempt and become subject to the effective prohibition requirement in CWA section 402(p)(3)(B)(ii). This review of the storm water regulations and USEPA’s discussion of the definition of storm water in its preamble to these regulations strongly supports the interpretation that storm water includes only precipitation-related discharges. Therefore, non-precipitation related discharges are not storm water discharges and, therefore, are not subject to the MEP standard in CWA section 402(p)(3)(B)(iii). Rather, non-storm water discharges shall be effectively prohibited pursuant to CWA section 402(p)(3)(B)(ii).

3. Non-Storm Water Regulation

Non-storm water discharges from the MS4 that are not authorized by separate NPDES permits, nor specifically exempted, are subject to requirements under the NPDES program, including discharge prohibitions, technology-based effluent limitations and water quality-based effluent limitations (40 CFR § 122.44). USEPA’s preamble to the storm water regulations also supports the interpretation that regulation of non-storm water discharges through an MS4 is not limited to the MEP standard in CWA section 402(p)(3)(B)(iii):

“Today’s rule defines the term “illicit discharge” to describe any discharge through a municipal separate storm sewer system that is not composed entirely of storm water and that is not covered by an NPDES permit. Such illicit discharges are not authorized under the Clean Water Act. Section 402(p)(3)(B) requires that permits for

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discharges from municipal separate storm sewers require the municipality to “effectively prohibit” non-storm water discharges from the municipal separate storm sewer...Ultimately, such non-storm water discharges through a municipal separate storm sewer must either be removed from the system or become subject to an NPDES permit.” (55 Fed.-Reg. 47990, 47995.)

In its 1990 rulemaking, USEPA explained that the illicit discharge detection and elimination program requirement was intended to begin to implement the Clean Water Act’s provision requiring permits to “effectively prohibit non-storm water discharges.” (55 Fed.Reg. 47990, 47995.)

4. Authorized and Conditionally Exempt Non-Storm Water Discharges

The previous permit, Order No. 01-182, contained provisions exempting several categories of non-storm water discharges from the discharge prohibition, including discharges covered by a separate individual or general NPDES permit for non-storm water discharges, natural flows, flows from emergency fire fighting activity, and flows incidental to urban activities. This Order retains these same categories, but with several enhancements. Natural flows specified in this Order include natural springs and rising ground water; flows from riparian habitats and wetlands; diverted stream flows authorized by the State or Regional Water Board; and uncontaminated ground water infiltration. Flows incidental to urban activities specified in this Order include landscape irrigation; dechlorinated/debrominated swimming pool discharges; dewatering of lakes and decorative fountains; non-commercial car washing by residents or by non-profit organizations; and street/sidewalk washwater. This Order separately identifies flows from non-emergency fire fighting activities and discharges from potable water sources as “essential” non-storm water discharges rather than combining them into the same category as the other non-storm water discharges incidental to urban activities. In doing so, the Regional Water Board recognizes that these discharges are essential public service discharge activities and are directly or indirectly required by other state or federal statute and/or regulation. This Order continues to unconditionally exempt emergency fire fighting discharges from the discharge prohibition.

Like Order No. 01-182, this Order contains a provision that the Regional Water Board Executive Officer may add or remove categories of exempt non-storm water discharges. In addition, in the event that any of the categories of non-storm water discharges are determined to be a source of pollutants by the Executive Officer then the discharges will no longer be exempt unless the Permittee implements conditions approved by the Executive Officer to ensure that the discharge is not a source of pollutants. Also the Executive Officer may impose additional prohibitions of non-storm water discharges in consideration of antidegradation policies and TMDLs.

5. BMPs for Non-Storm Water Discharges

In this Order, no changes have been made to the types of non-storm water discharges included in the non-storm water discharge prohibition exemptions, with one exception related to temporary discharges authorized by USEPA pursuant to

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sections 104(a) or 104(b) of CERCLA. However, the non-storm water discharge provisions in this Order have been reworded to clarify the requirements for addressing authorized and conditionally exempt non-storm water discharges that are not prohibited. In particular, language has been added to explicitly identify State and Regional Water Board permits that are applicable to some of the exempted non-storm water discharges. The State and Regional Water Board general permits referenced in this Order and their applicability to the different types of non-storm water discharges that are routinely discharged through the MS4 is contained in Table F-4 below.

Table F-4. State and Regional Water Board General Permits Referenced in this Permit

Order/NPDES Permit No.	Applicable Types of Discharges
NPDES Permit No. CAG994003 – Discharges of Nonprocess Wastewater to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties	<ul style="list-style-type: none"> • Ground water seepage • Uncontaminated pumped ground water • Gravity flow from foundation drains, footing drains, and crawl space pumps • Air conditioning condensate • Discharges of cleaning wastewater and filter backwash
NPDES Permit No. CAG994004 – Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties	<ul style="list-style-type: none"> • Uncontaminated pumped ground water • Discharges from activities that occur at wellheads, such as well construction, well development (e.g., aquifer pumping tests, well purging), or major well maintenance • Gravity flow from foundation drains, footing drains, and crawl space pumps • Discharges of ground water from construction and project dewatering⁶
NPDES Permit No. CAG990002 – Discharges from Utility Vaults and Underground Structures to Surface Waters	<ul style="list-style-type: none"> • Uncontaminated pumped ground water • Gravity flow from foundation drains, footing drains, and crawl space pumps

⁶ Discharges of ground water from construction and project dewatering include treated or untreated wastewater from permanent or temporary construction dewatering operations; ground water pumped as an aid in the containment and/or cleanup of a contaminant plume; ground water extracted during short-term and long-term pumping/aquifer tests; ground water generated from well drilling, construction or development and purging of wells; equipment decontamination water; subterranean seepage dewatering; incidental collected storm water from basements; and other process and non-process wastewater discharges that meet the eligibility criteria and could not be covered under another specific general NPDES permit.

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Order/NPDES Permit No.	Applicable Types of Discharges
NPDES Permit No. CAG674001 – Discharges From Hydrostatic Test Water to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties	<ul style="list-style-type: none"> Discharges of low threat hydrostatic test water⁷
NPDES Permit No. CAG914001 – Discharges of Treated Groundwater from Investigation and/or Cleanup of Volatile Organic Compounds Contaminated-Sites to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties	<ul style="list-style-type: none"> Discharges of treated ground water from investigation and/or cleanup of volatile organic compound (VOC) contaminated sites
NPDES Permit No. CAG994005 – Discharges of Ground Water from Water Supply Wells to Surface Waters in Los Angeles and Ventura Counties	<ul style="list-style-type: none"> Discharges of ground water from potable water supply wells⁸
NPDES Permit No. CAG834001 – Waste Discharge Requirements for Treated Groundwater and Other Wastewaters from Investigation and/or Cleanup of Petroleum Fuel-Contaminated Sites to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties	<ul style="list-style-type: none"> Discharges of treated ground water and other waste waters from investigation and/or cleanup of petroleum fuel contaminated sites

This Order explicitly adds another category of authorized non-storm water discharge for discharges authorized by USEPA pursuant to sections 104(a) or 104(b) of the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). These discharges typically consist of short-term, high volume discharges resulting from the development or redevelopment of groundwater extraction wells, or USEPA or State-required compliance testing of potable water treatment plants, as part of a USEPA authorized groundwater remediation action under CERCLA. These discharges through the MS4 are only authorized if: (i) the discharge will comply with water quality standards identified as applicable or relevant and appropriate requirements (“ARARs”) under section 121(d)(2) of CERCLA; or (ii) the discharge is subject to either (a) a written waiver of ARARs by USEPA pursuant to section 121(d)(4) of CERCLA or (b) a written determination by USEPA that compliance with ARARs is not practicable considering the exigencies of the situation, pursuant to 40 CFR section 300.415(j). Additionally, a decision to authorize a discharge through the

⁷ Low threat hydrostatic test water means discharges resulting from the hydrostatic testing or structural integrity testing of pipes, tanks, or any storage vessels using domestic water or from the repair and maintenance of pipes, tanks, or reservoirs.

⁸ Discharges covered by this permit include ground water from potable water supply wells generated during the following activities: ground water generated during well purging for data collection purposes; ground water extracted from major well rehabilitation and redevelopment activities; and ground water generated from well drilling, construction, and development.

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MS4 to surface waters will not be made by USEPA without first conducting a comprehensive evaluation of containment, treatment, reinjection, or re-use options for the water generated from the subject wells. If a decision to discharge through the MS4 is made, USEPA's authorization of the discharge under CERCLA will require that the discharger shall:

- (1) Implement BMPs to minimize the rate and duration of the discharge and remove excessive solids, and implement other on-site physical treatment where feasible.
- (2) Promote infiltration of discharged water in locations that will prevent or minimize degradation of groundwater quality.
- (3) Notify the affected MS4 Permittees, including the LACFCD and the MS4 Permittee with land use authority over the discharge location, and the Regional Water Board at least one week prior to a planned discharge (unless USEPA determines in writing that exigent circumstances require a shorter notice period) and as soon as possible (but no later than 24 hours after the discharge has occurred) for unplanned discharges;
- (4) Monitor any pollutants of concern in the discharge⁹; and
- (5) Maintain records for all discharges greater than ~~one acre-foot~~ 100,000 gallons.¹⁰

In addition to requiring NPDES permit coverage for applicable categories of non-storm water discharges, this Order contains language that specifies certain conditions, including implementation of BMPs, for each category of conditionally exempt non-storm water discharge that must be met in order for the non-storm water discharge to be exempted from the non-storm water prohibition and thus allowed through the MS4.

The California Recycled Water Policy, adopted by the State Water Board in Resolution No. 2009-0011, calls for an increase in the use of recycled water from municipal wastewater sources that meet the definition in California Water Code section 13050(n), in a manner that implements state and federal water quality laws. In support of the California Recycled Water Policy, a provision has been added requiring that alternative means of disposal or opportunities for capture, reclamation, and reuse must be evaluated prior to discharging any of the non-storm water discharge categories to the MS4. In addition, to ensure the protection of receiving

⁹ Pollutants of concern include, at a minimum, trash and debris, including organic matter, TSS, any pollutant being addressed by the groundwater remediation action under CERCLA, and any pollutant for which there is a Water Quality Based Effluent Limitation in Part VI.E applicable to discharges from the MS4 to the receiving water.

¹⁰ Records shall be maintained, as appropriate, on the: name of CERCLA authorized discharger, date and time of notification (for planned discharges), method of notification, location of discharge, discharge pathway, receiving water, date of discharge, time of the beginning and end of the discharge, duration of the discharge, flow rate or velocity, estimated total number of gallons discharged, type of pollutant removal equipment used, type of dechlorination equipment used if applicable, type of dechlorination chemicals used if applicable, concentration of residual chlorine if applicable, type(s) of sediment controls used, and field and laboratory monitoring data. Records shall be retained for three years, unless the Regional Water Board requests a longer record retention period and shall be made available upon request by the MS4 Permittee or the Regional Water Board.

water quality all non-storm water discharges must be segregated from potential sources of pollutants to prevent the introduction of pollutants to the discharge.

In establishing provisions specific to different non-storm water discharge types, the Regional Water Board reviewed non-storm water discharge provisions and BMPS included in other area MS4 permits. MS4 permits reviewed included the Ventura County MS4 permit (R4-2009-0057), the Orange County MS4 permit (Order No. R9-2009-0002), the Riverside County MS4 permit (R9-2010-0016), and the San Diego County MS4 permit (R9-2007-0001). Conditions established in this permit for each of the non-storm water discharge categories ensure the protection of receiving water quality and are considered common practices.

Dischargers permitted under NPDES Permit No. CAG990002 are required to contact the appropriate Permittee(s) with jurisdiction over the MS4, including but not limited to the Los Angeles County Flood Control District, within 24 hours, whenever there is a discharge of 50,000 gallons or more from utility vaults and underground structures to the MS4. ~~This MS4 notification requirement for dischargers of uncontaminated pumped groundwater permitted under NPDES Permit No. CAG990002 has been added to this iteration of the permit to ensure that Permittees are aware of the requirement and can monitor the discharge to the MS4 as appropriate.~~

The conditions for landscape irrigation have been split into potable and reclaimed landscape irrigation categories. As identified in the Orange County MS4 permit incidental runoff from landscape irrigation projects including over irrigation and overspray have the potential to contribute landscape derived pollutants such as bacteria, nutrients, and pesticides to receiving waters. In addition, the California Recycled Water Policy identifies the need for control of incidental runoff from landscape irrigation projects, particularly as it relates to recycled water use. The BMPs incorporated into the permit for potable landscape irrigation ensure that water is conserved, overspray and over irrigation causing incidental runoff is minimized, and exposure to landscape related pollutants is minimized.

State Water Board Water Quality Order No. 2009-0006-DWQ, General Waste Discharge Requirements for Landscape Irrigation Uses of Municipal Recycled Water, is a general permit for producers and distributors of recycled water for landscape irrigation uses. As part of this general permit, the producers and distributors of recycled water for landscape irrigation are required to develop an Operations and Maintenance Plan (O&M Plan) that includes an Operations Plan and an Irrigation Management Plan. Therefore, any reclaimed landscape irrigation discharges to the MS4 must comply with the relevant portion of the O&M Plan including the Irrigation Management Plan. By explicitly referencing the O&M requirement in this permit, it centralizes the requirements for reclaimed landscape irrigation and helps to ensure that procedures are in place for conserving water, minimizing incidental runoff, and minimizing exposure to landscape related pollutants.

Non-storm water discharge provisions have been added for the dewatering of lakes to the MS4. The provisions for the dewatering of lakes including removing and

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legally disposing of all visible trash on the shoreline or on the surface of the lake and the cleaning of the MS4 inlet and outlet where the water will be discharged to the receiving water have been consistently incorporated into Regional Water Board authorizations to discharge non-storm water from lakes, reservoirs, and ponds. In addition provisions for volumetrically and velocity controlling discharges as well as taking measurements to stabilize lake bottom sediments are incorporated into the provisions of this Order to ensure that turbidity in receiving waters are maintained at an acceptable level. The permit provisions for the dewatering of lakes ensure the protection of receiving water quality.

Basin plan requirements for residual chlorine have been explicitly included in the conditions for potable drinking water supply and distribution system releases, dechlorinated/debrominated swimming pool/spa discharges, and dewatering of decorative fountains. Related to swimming pool discharges, discharges of cleaning wastewater and filter backwash are specifically mentioned as being allowed only if authorized under a separate NPDES permit. The Regional Water Board has a general permit for discharges of nonprocess wastewater to surface waters in coastal watersheds of Los Angeles and Ventura counties (NPDES Permit No. CAG994003) that may address discharges of cleaning wastewater and filter backwash.

Specific BMPs for discharges of swimming pools/spas and the dewatering of decorative fountains have been added to this Order including prohibiting the dewatering of swimming pools/spas or decorative fountains containing copper-based algaecides and requiring the implementation of controls to prevent introduction of pollutants prior to discharge. Swimming pool/spa discharges and decorative fountain water must be dechlorinated or debrominated using holding time, aeration, and/or sodium thiosulfate and if necessary shall be pH adjusted to within the range of 6.5 and 8.5. The MS4 inlet and outlet must be inspected and cleaned out immediately prior to discharge to protect receiving water quality. In addition provisions for volumetrically and velocity controlling discharges are incorporated into the provisions of this Order to ensure that turbidity in receiving waters are maintained at an acceptable level.

In addition to the specific inclusion of Basin Plan water quality objectives for residual chlorine, this Order allows discharges of potable drinking water supply and distribution system releases as long as specified BMPs are implemented. BMPs must be implemented to prevent introduction of pollutants to potable water releases prior to discharge to the receiving water. BMPs must be consistent with the American Water Works Association (California – Nevada Section) BMP Manual for Drinking Water System Releases and other applicable guidelines. Similar to discharges of swimming pools/spas and dewatering of decorative fountains, potable drinking water supply releases must be dechlorinated or debrominated using holding time, aeration, and/or sodium thiosulfate and if necessary shall be pH adjusted to within the range of 6.5 and 8.5. The MS4 inlet and outlet must be inspected and cleaned out immediately prior to discharge to protect receiving water quality. BMPs such as sand bags or gravel bags, or other appropriate means shall be utilized to prevent sediment transport and all sediment shall be collected and disposed of in a legal and appropriate manner. In addition provisions for volumetrically and velocity

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controlling discharges are incorporated into the provisions of this Order to ensure that turbidity in receiving waters are maintained at an acceptable level.

The permit provisions for potable drinking water supply and distribution system releases, dechlorinated/debrominated swimming pool/spa discharges, and dewatering of decorative fountains ensures the protection of receiving water quality.

The Regional Water Board evaluated and established a list of approved BMPs for various programs and activities through Regional Water Board Resolution 98-08 that serves as appropriate BMPs for inclusion in the Discharger and Permittees' regulatory programs. Requirements for street/sidewalk wash water contained in Resolution 98-08 have also been explicitly incorporated into this Order. The inclusion of the requirements contained in Resolution 98-08 helps to ensure that Permittees are aware of the requirements and ensures the protection of receiving water quality.

Specific BMPs for discharges from non-commercial car washing have been incorporated into this Order to prevent the introduction of pollutants prior to discharge. BMPs that must be implemented for the discharge of non-commercial vehicle wash water include minimizing the amount of water used by turning off nozzles or kinking the hose when not spraying a vehicle and by using a pressure washer; using biodegradable, phosphate free detergents and non-toxic cleaning products; where possible, washing vehicles on permeable surfaces where wash water can percolate into the ground; creating a temporary berm or block off the storm drains; using pumps or vacuums to direct water to pervious areas; and emptying buckets of soapy water or rinse water into the sanitary sewer system. These BMPs are common practice and ensure the protection of receiving water quality.

The inclusion of conditions for flows related to non-emergency fire-fighting activities is new to this iteration of the permit. Conditions for discharges related to fire fighting activities have been incorporated into other MS4 permits including both Orange County and Riverside County. Flows resulting from emergency fire fighting activities necessary for the protection of life or property do not require implementation of specific BMPs.

The specific BMPs for discharges associated with non-emergency fire fighting activities that have been incorporated into this Order have been incorporated into other California MS4 permits. Both the Riverside County and Orange County MS4 permits require the development and implementation of a program to address pollutants from non-emergency fire fighting flows. Rather than develop a program to address non-emergency fire fighting flows, common BMPs used in association with non-emergency fire fighting discharges have been incorporated into this Order. Guidance on BMPs contained in this Order for non-emergency fire fighting activities is available in the Best Management Practices Plan for Urban Runoff Management for Participating Riverside County Fire Fighting Agencies.

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The inclusion of specific conditions for exempted non-storm water discharges in this Order centralizes the requirements for non-storm water discharges. Conditions established in this permit for each of the conditionally exempt non-storm water discharge categories are common practice and have been incorporated into other area MS4 permits.

6. Permittee Requirements for Non-Storm Water Discharges

This Order includes specific requirements for Permittees related to more targeted screening of MS4 outfalls for non-storm water discharges, and monitoring and evaluation of significant non-storm water discharges. Permittees are required to develop and implement procedures to ensure that all conditions required for conditionally exempt non-storm water discharges are being implemented. These requirements also help to clarify the responsibilities of the Permittees versus the responsibilities of the non-MS4 Permittee dischargers to the MS4. The development and implementation of these procedures helps to ensure compliance with the non-storm water discharge prohibition and ensure that the non-storm water discharges are not sources of pollutants.

B. Technology-Based Effluent Limitations

Section 301(b)(1)(A) of the CWA and 40 CFR section 122.44(a) require that NPDES permits include technology based effluent limitations.¹¹ In 1987, the CWA was amended to require that municipal storm water discharges “reduce the discharge of pollutants to the maximum extent practicable.” (CWA § 402(p)(3)(B)(iii).) The “maximum extent practicable” (MEP) standard is the applicable federal technology based standard that MS4 owners and operators must attain to comply with their NPDES permits.¹² The corresponding regulatory provisions that further detail the MEP standard can be found in 40 CFR sections 122.26(d)(2)(iv) and 122.44(k)(2).

Neither Congress nor the USEPA has specifically defined the term “maximum extent practicable.” Rather, the MEP standard is a flexible and evolving standard. Congress established this flexible MEP standard so that administrative bodies would have “the tools to meet the fundamental goals of the Clean Water Act in the context of storm water pollution.”¹³ This standard was designed to allow permit writers flexibility to tailor permits to the site-specific nature of MS4s and to use a combination of pollution controls that may be different in different permits.¹⁴ The MEP standard is also expected to evolve in light of programmatic improvements, new source control initiatives, and technological advances that serve to improve the overall effectiveness of storm water management programs in reducing pollutant loading to receiving waters. This is consistent with

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¹¹ A technology based effluent limitation is based on the capability of a model treatment method to reduce a pollutant to a certain concentration (NPDES Permit Writer’s Manual, Appendix A). Technology based requirements represent the minimum level of control that must be imposed in a permit issued under CWA § 402.

¹² Note that the MEP standard only applies to storm water discharges from the MS4. Non-storm water discharges are subject to a different standard – specifically, non-storm water discharges through the MS4 must be effectively prohibited.

¹³ *Building Industry Ass’n of San Diego County v. State Water Resources Control Board*, (2004), 124 Cal.-App.-4th 866, 884 (2004).

¹⁴ *In re City of Irving, Texas, Municipal Storm Sewer System*, (July 16, 2001), 10 E.A.D. 111 (E.P.A.), *6.

USEPA's interpretation of storm water management programs. As explained by USEPA in its 1990 rulemaking, "EPA anticipates that storm water management programs will evolve and mature over time" (55 Fed.-Reg. 47990, 48052 (Nov. 16, 1990)). There is ample evidence of this evolution in storm water management. Two local examples include the development of full capture trash control devices in response to the Los Angeles Region Trash TMDLs, and the development of innovative media filters for use in outfalls at the Boeing Santa Susana Field Laboratory that have potential municipal applications.

To provide clarification to the Regional Water Boards, the State Water Board's Office of Chief Counsel issued a memorandum dated February 11, 1993 regarding the "Definition of 'Maximum Extent Practicable'". In the memorandum, the State Water Board interpreted the MEP standard to entail "a serious attempt to comply," and that under the MEP standard, "practical solutions may not be lightly rejected." The memorandum states, "[i]n selecting BMPs which will achieve MEP, it is important to remember that municipalities will be responsible to reduce the discharge of pollutants in storm water to *the maximum extent practicable*. This means choosing effective BMPs, and rejecting applicable BMPs only where other effective BMPs will serve the same purpose, the BMPs would not be technically feasible, or the cost would be prohibitive." The memorandum further states that, "[a]fter selecting a menu of BMPs, it is of course the responsibility of the discharger to insure that all BMPs are implemented."

This Order includes programmatic requirements in six areas pursuant to 40 CFR section 122.26(d)(2)(iv) as well as numeric design standards for storm water runoff from new development and redevelopment consistent with the federal MEP standard (see State Water Board Order WQ 2000-11, the "LA SUSMP Order"). This Order also includes protocols for periodically evaluating and modifying or adding control measures, consistent with the concept that MEP is an evolving and flexible standard.

This Order also provides for the use of municipal action levels ("MALs") derived from the National Stormwater Quality Database (NSQD), as a means of evaluating the overall effectiveness of a Permittee's storm water management program in reducing pollutant loads from a particular drainage area and in order to assess compliance with the MEP standard. Finally, this Order includes BMP Performance Standards derived from the International BMP Database as a guide for BMP selection and design, and as a tool for evaluating the effectiveness of individual post-construction BMPs in reducing pollutant loads and assessing compliance with the MEP standard. USEPA recommends the use of numeric benchmarks for BMPs to estimate BMP effectiveness and as triggers for taking additional actions such as evaluating the effectiveness of individual BMPs, implementing and/or modifying BMPs, or providing additional measures to protect water quality.¹⁵

¹⁵ See USEPA November 22, 2002 memorandum, "Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs."

C. Water Quality-Based Effluent Limitations (WQBELs)

In addition to requiring that MS4 permits include technology based requirements consistent with the MEP standard, section 402(p)(3)(B)(iii) of the CWA authorizes the inclusion of “such other provisions as the Administrator or the State determines appropriate for the control of [] pollutants.”¹⁶ This requirement gives USEPA or the State permitting authority discretion to determine what permit conditions are necessary to control pollutants. Generally, permit requirements designed to achieve water quality standards are referred to as water quality based effluent limitations (WQBELs). A WQBEL is a restriction on the quantity or concentration of a pollutant that may be discharged from a point source into a receiving water that is necessary to achieve an applicable water quality standard in the receiving water.¹⁷ WQBELs may be expressed narratively or numerically.

In its Phase I Stormwater Regulations, Final Rule, USEPA elaborated on these requirements, stating that, “permits for discharges from municipal separate storm sewer systems must require controls to reduce the discharge of pollutants to the maximum extent practicable, and where necessary water quality-based controls” (see 55 Fed. Reg. 47990, 47994 (Nov. 16, 1990)). In December 1999, USEPA reiterated in its Phase II Stormwater Regulations, Final Rule that MS4 “permit conditions must provide for attainment of applicable water quality standards (including designated uses), allocations of pollutant loads established by a TMDL, and timing requirements for implementation of a TMDL.”¹⁸ The State Water Board has affirmed that MS4 permits must include requirements necessary to achieve compliance with the applicable technology based standard of MEP and to achieve water quality standards.¹⁹

WQBELs are required for point source discharges that have the reasonable potential to cause or contribute to an excursion of water quality standards and technology based effluent limitations or standards are not sufficient to achieve water quality standards.²⁰

The State Water Board has previously concluded that sole reliance in MS4 permits on BMP based requirements is not sufficient to ensure attainment of water quality standards. (See State Water Board Order 2001-015). The Regional Water Board concurs with this conclusion. This conclusion is amply supported by Regional Water Board and USEPA established TMDLs for impaired waters in the Los Angeles Region, indicating that MS4 discharges are a continuing source of pollutants to the impaired receiving waters notwithstanding the implementation of storm water management

¹⁶ The first and second iterations of the Los Angeles County MS4 Permit relied solely upon requirements consistent with the MEP standard to work toward achieving water quality standards. Note that the MEP standard is distinct from a water quality based standard; each has a different basis. Therefore, while from a practical point of view, the goal of all MS4 permit conditions is to control pollutants in discharges to ultimately achieve certain water quality outcomes, water quality based standards are directly derived from this desired outcome, while the MEP standard is anticipated to be a way of working toward the desired outcome, but is not directly derived from it.

¹⁷ See 40 CFR § 122.2; NPDES Permit Writer’s Manual, Appendix A. A WQBEL is distinguished from a technology based effluent limitation (TBEL) in that the basis for the WQBEL is the applicable water quality standard for the receiving water, while the basis for the TBEL is generally the performance of the best available technology.

¹⁸ See, e.g., Phase II Stormwater Regulations, Final Rule, 64 Fed. Reg. 68722, 68737.

¹⁹ See, e.g., State Water Board Orders WQ 99-05 and 2001-15.

²⁰ 40 CFR §§ 122.44(d)(1)(i); 122.44(d)(1)(iii)

programs that have been driven by the MEP standard by Permittees for the last two decades.

In this Order, WQBELs are included where the Regional Water Board has determined that discharges from the MS4 have the reasonable potential to cause or contribute to an excursion above water quality standards.²¹ Reasonable potential can be demonstrated in several ways, one of which is through the TMDL development process. Where a point source is assigned a WLA in a TMDL, the analysis conducted in the development of the TMDL provides the basis for the Regional Water Board's determination that the discharge has the reasonable potential to cause or contribute to an exceedance of water quality standards in the receiving water. This approach is affirmed in USEPA's Permit Writer's Manual, which states, "[w]here there is a pollutant with a WLA from a TMDL, a permit writer must develop WQBELs." Therefore, WQBELs are included in this Order for all pollutants for which a WLA is assigned to MS4 discharges.

Federal regulations further require that, "when developing water quality-based effluent limits...the permitting authority shall ensure that effluent limits ... are consistent with the assumptions and requirements of any available wasteload allocation for the discharge..." (40 CFR § 122.44(d)(1)(vii)(B)).

The Regional Water Board interprets this to mean that the final WQBEL must be expressed in similar terms as the underlying WLA; for example, where a TMDL includes WLAs for MS4 discharges that provide numeric pollutant load objectives, the WLA should be translated into numeric WQBELs in the permit, and at a level to achieve the same expected water quality outcome. USEPA also recommends the use of numeric WQBELs to meet water quality standards where MS4 discharges have the reasonable potential to cause or contribute to a water quality standard excursion. Numeric WQBELs will help clarify MS4 permit requirements and improve accountability in this permit term.

While BMPs²² are central to MS4 permits, permit requirements may only rely upon BMP based limitations in lieu of water quality based effluent limitations if: (1) the BMPs are adequate to achieve water quality standards, and (2) numeric effluent limitations are infeasible.²³ As discussed earlier, the State and Regional Water Boards have concluded that sole reliance on MEP based permit requirements is not sufficient to ensure the achievement of water quality standards. Further, there is insufficient data and information available at this time on the prospective implementation of BMPs throughout Los Angeles County to provide the Regional Water Board reasonable assurance that the BMPs would be sufficient to achieve the WQBELs.²⁴

²¹ 40 CFR §§ 122.44(d)(1)(i)-(iii); 122.44(d)(1)(vii)(B)

²² Note that best management practices and effluent limitations are two different types of permit requirements (see 40 CFR §§ 122.2; 122.44(k), which distinguish the two terms and describe their relationship to each other).

²³ 40 CFR §§ 122.44(d)(1); 122.44(k)(3); see also State Water Board Order 91-03; Memorandum from Elizabeth Miller Jennings, Office of Chief Counsel to Bruce Fujimoto, Division of Water Quality, "Municipal Storm Water Permits: Compliance with Water Quality Objectives," October 3, 1995.

²⁴ USEPA states in its 2002 memorandum, "Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs" that, "[w]hen a non-numeric water quality-based effluent limit is imposed, the permit's administrative record, including the fact sheet when one is required, needs to support that the BMPs are expected to be sufficient to implement the WLA in the TMDL," citing 40 CFR §§ 124.8, 124.9, and 124.18. See also USEPA's 2010 memorandum revising the 2002 memorandum.

Regarding the feasibility of numeric effluent limitations, the Regional Water Board concludes that numeric WQBELs are feasible. While a lack of data may have hampered the development of numeric effluent limitations for MS4 discharges in earlier permit cycles, in the last decade, 33 TMDLs have been developed for water bodies in Los Angeles County in which WLAs are assigned to MS4 discharges. In each case, part of the development process entailed analyzing pollutant sources and allocating loads using empirical relationships or modeling approaches. As a result, it is possible to use these numeric WLAs to derive numeric WQBELs for MS4 discharges. USEPA has also acknowledged that its expectations regarding the application of numeric WQBELs to municipal storm water discharges have changed as the storm water permit program has continued to mature over the last decade.²⁵

The inclusion of numeric WQBELs is also consistent with the Ninth Circuit Court of Appeal's ruling in *Defenders of Wildlife v. Browner* (191 F.3d 1159, 1166 (1999)) that the permitting authority has discretion regarding the nature and timing of requirements that it includes as MS4 permit conditions to attain water quality standards, and that these requirements may include numeric effluent limitations.

Further, given the variability in implementation of storm water management programs across Permittees, numeric WQBELs create an objective, equitable and accountable means of controlling MS4 discharges, while providing the flexibility for Permittees to comply with the WQBELs in any lawful manner.

D. Final Effluent Limitations

Final WQBELs are included in this Order based on the final WLAs assigned to discharges from the Los Angeles County MS4 in all available TMDLs.

MS4 permits can include compliance schedules for achieving final WQBELs derived from TMDL WLAs, so long as the compliance schedule is consistent with a TMDL implementation plan adopted by the Regional Water Board and approved through the State's basin plan amendment process. If a compliance schedule exceeds one year, it must include interim requirements pursuant to 40 CFR section 122.47.

Section 402(o) of the CWA and 40 CFR section 122.44(l) require that effluent limitations ~~or conditions~~ in reissued orders be at least as stringent as those in the existing order. This Order carries over the final receiving water limitations and WQBELs that were included to implement the Marina del Rey Harbor Back Basins and Mothers' Beach Bacteria TMDL and the Los Angeles River Trash TMDL, respectively, in the 2007 and 2009 amendments to Order No. 01-182.

E. Interim Effluent Limitations

²⁵ See USEPA 2010 memorandum, "Revisions to the November 22, 2002 Memorandum 'Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs'" in which USEPA states, "where the NPDES permitting authority determines that MS4 discharges...have the reasonable potential to cause or contribute to water quality standards excursions, permit for MS4s...should contain numeric effluent limitations where feasible to do so." USEPA further states, "[w]here the TMDL includes WLAs for stormwater sources that provide numeric pollutant load...objectives, the WLA should, where feasible, be translated into numeric WQBELs in the applicable stormwater permits."

Where there is a TMDL implementation plan adopted by the Regional Water Board and approved through the State's basin plan amendment process, interim WQBELs are included in this Order based on interim WLAs established for MS4 discharges.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Receiving Water Limitations

Receiving water limitations are included in all NPDES permits issued pursuant to CWA section 402. Section 402(p)(3)(B)(iii) of the CWA authorizes the inclusion of "such other provisions as the Administrator or the State determines appropriate for the control of [] pollutants." This requirement gives USEPA or the State permitting authority discretion to determine what permit conditions are necessary to control pollutants. In its Phase I Stormwater Regulations, Final Rule, USEPA elaborated on these requirements, stating that, "permits for discharges from municipal separate storm sewer systems must require controls to reduce the discharge of pollutants to the maximum extent practicable, and where necessary water quality-based controls" (see 55 Fed. Reg. 47990, 47994 (Nov. 16, 1990)). USEPA reiterated in its Phase II Stormwater Regulations, Final Rule, that MS4 "permit conditions must provide for attainment of applicable water quality standards (including designated uses), allocations of pollutant loads established by a TMDL, and timing requirements for implementation of a TMDL."²⁶ USEPA Region IX has also affirmed the agency's position that MS4 discharges must meet water quality standards in a series of comment letters on MS4 permits issued by various California regional water boards.²⁷ California Water Code section 13377 also requires that NPDES permits include limitations necessary to implement water quality control plans. Both the State Water Board and Regional Water Board have previously concluded that discharges from the MS4 contain pollutants that have the reasonable potential to cause or contribute to excursion above water quality standards. As such, inclusion of receiving water limitations is appropriate to control MS4 discharges.

The inclusion of receiving water limitations is also consistent with the Ninth Circuit Court of Appeal's ruling in *Defenders of Wildlife v. Browner* (191 F.3d 1159, 1166 (1999)) that the permitting authority has discretion regarding the nature and timing of requirements that it includes as MS4 permit conditions to attain water quality standards.

The Ninth Circuit Court of Appeals recently explained that, "[w]ater quality standards are used as a supplementary basis for effluent limitations [guidelines] so that numerous dischargers, despite their individual compliance with technology based effluent limitations, can be regulated to prevent water quality from falling below acceptable levels" (*NRDC v. County of Los Angeles* (2011); 673 F.3d 880, 886). Receiving water limitations are included in this Order to ensure that individual and collective discharges from the MS4 do not cause or contribute to exceedances of water quality standards necessary to protect the beneficial uses of the receiving waters.

²⁶ See, e.g., Phase II Stormwater Regulations, Final Rule, 64 Fed. Reg. 68722, 68737.

²⁷ See, e.g., letter from Alexis Strauss, Acting Director, Water Division, USEPA Region IX, to Walt Pettit, Executive Director, State Water Board, re: SWRCB/OCC File A-1041 for Orange County, dated January 21, 1998.

The receiving water limitations in this Order consist of all applicable numeric or narrative water quality objectives or criteria, or limitations to implement the applicable water quality objectives or criteria, for receiving waters as contained in Chapters 3 and 7 of the Basin Plan, or in water quality control plans or policies adopted by the State Water Resources Control Board, including Resolution No. 68-16, or in federal regulations, including but not limited to, 40 CFR sections 131.12 and 131.38. The water quality objectives in the Basin Plan and other State Water Board plans and policies have been approved by USEPA and combined with the designated beneficial uses constitute the water quality standards required under federal law.

The receiving water limitations provisions in this Order are the same as those included in the previous Los Angeles County MS4 Permit provisions, and are based on precedential State Water Board Orders WQ 98-01 and WQ 99-05.

This Order includes three main provisions related to receiving water limitations. First, consistent with CWA section 402(p)(B)(3)(iii) and 40 CFR section 122.44(d)(1), it includes a provision stating that discharges from the MS4 that cause or contribute to an exceedance of receiving water limitations are prohibited. This is also in accord with the State Water Board's finding in Order WQ 98-01 ("The [State Water Board] agrees that the NPDES permit must prohibit discharges that "cause" or "contribute" to violations of water quality standards."). Second, it includes a provision stating that discharges from the MS4 of stormwater or non-stormwater, for which a Permittee is responsible, shall not cause or contribute to a condition of nuisance.²⁸

Third, it includes a provision that states that Permittees shall achieve these two prohibitions "through timely implementation of control measures and other actions to reduce pollutants in the discharges in accordance with the storm water management program and its components and other requirements of this Order including any modifications." This third provision elucidates the process by which Permittees are expected to achieve the first two provisions and then outlines the so-called "iterative process" whereby certain actions are required when exceedances of receiving water limitations occur and discharges from the MS4 are implicated. This iterative process includes submitting a Receiving Water Limitations Compliance Report; revising the storm water management program and its components to include additional BMPs, an implementation schedule and additional monitoring to address the exceedances; and implementing the revised storm water management program. The inclusion of this protocol for estimating BMP effectiveness and taking additional actions such as implementing additional BMPs and/or modifying BMPs to improve their effectiveness when monitoring demonstrates that they are necessary to protect water quality is consistent with USEPA's expectations for MS4 permits.²⁹

The State and Regional Water Boards have stated that each of the three provisions are independently applicable, meaning that compliance with one provision does not provide

²⁸ Wat. Code, § 13377 ("the state board or the regional boards shall . . . issue waste discharge requirements and dredged or fill material permits which apply and ensure compliance with all applicable provisions of the [CWA], thereto, together with any more stringent effluent standards or limitations necessary to implement waste quality control plans, or for the protection of beneficial uses, or to prevent nuisance").

²⁹ See, e.g., USEPA 2002 memorandum, "Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs."

a “safe harbor” where there is non-compliance with another provision (i.e., compliance with the third provision does not shield a Permittee who may have violated the first or second provision from an enforcement action). Rather, the third provision is intended to ensure that the necessary storm water management programs and controls are in place, and that they are modified by Permittees in a timely fashion when necessary, so that the first two provisions are achieved as soon as possible. USEPA expressed the importance of this independent applicability in a series of comment letters on MS4 permits proposed by various regional water boards. At that time, USEPA expressly objected to certain MS4 permits that included language stating, “permittees will not be in violation of this [receiving water limitation] provision ...” (if certain steps are taken to evaluate and improve the effectiveness of the Drainage Area Management Plan (DAMP)), concluding that this phrase would not comply with the CWA.³⁰

~~The receiving water limitations provisions in this Order are the same as those included in the previous Los Angeles County MS4 Permit provisions, and are based on precedential State Water Board Orders WQ 98-01 and WQ 99-05.~~

The Receiving Water Limitations provisions of Order No. 01-182 have been litigated twice, and in both cases the courts have upheld the language and the State and Regional Water Board’s interpretation of it. Both courts ruled that the first two provisions are independently applicable from the third provision that establishes the “iterative process” requirements and no “safe harbor” exists.

The provisions were first litigated in 2005 where the Los Angeles County Superior Court stated, “In sum, the Regional [Water] Board acted within its authority when it included Parts 2.1 and 2.2 in the Permit without a ‘safe harbor,’ whether or not compliance therewith requires efforts that exceed the ‘MEP’ standard.” (*In re L.A. Cnty. Mun. Storm Water Permit Litig.*, No. BS 080548, at 4-5, 7 (L.A. Super. Ct., No. BS 080548, Mar. 24, 2005) Statement of Decision from Phase I Trial on Petitions for Writ of Mandate, pp. 4-5, 7.).

The provisions were again litigated in 2011. In that case, the Ninth Circuit Court of Appeal in *NRDC v. County of Los Angeles* (673 F.3d 880, 886) affirmed that the iterative process (in Part 2.3 of the 2001 Order) does not “forgive” violations of the discharge prohibitions (in Parts 2.1 and 2.2 of the 2001 Order). The court acknowledged that Part 2.3 clarifies that Parts 2 and 3 interact, but the court concluded that Part 2.3 “offers no textual support for the proposition that compliance with certain provisions shall forgive non-compliance with the discharge prohibitions.” The Ninth Circuit further concluded that, “[a]s opposed to absolving noncompliance or exclusively adopting the MEP standard, the iterative process ensures that if water quality standards ‘persist,’ despite prior abatement efforts, a process will commence whereby a responsible Permittee amends its SQMP. Given that Part 3 of the [2001] Permit states that SQMP implementation is the ‘minimum’ required of each Permittee, the discharge prohibitions serve as additional requirements that operate as enforceable water-quality-based performance standards required by the Regional Board.”

³⁰ See note 20.

This Order includes requirements in Part VI.E of this Order to implement WLAs assigned to MS4 discharges from 33 TMDLs. Those TMDLs adopted through the State's basin planning process include programs of implementation pursuant to California Water Code section 13242, including implementation schedules, for attaining water quality standards. The TMDL provisions in Part VI.E and attachments include compliance schedules for TMDLs adopted by the Regional Water Board consistent with the TMDL implementation schedule to achieve the final receiving water limitations. The Regional Water Board recognizes that, in the case of impaired waters subject to a TMDL, the permit's receiving water limitations for the pollutants addressed by the TMDL may be exceeded during the period of TMDL implementation. Therefore, this Order provides, in Part VI.E.2.c, that an MS4 Permittee shall not be considered in violation of a receiving water limitation in Part V.A. of this Order for the particular pollutant addressed by the TMDL, if the Permittee is in full compliance with the applicable TMDL requirements pursuant to the compliance schedules in this Order.

For water body-pollutant combinations not addressed by a TMDL, the Regional Water Board has included provisions in Part VI.C. to allow Permittees to develop a Watershed Management Program to address receiving water limitations not otherwise addressed by a TMDL. The Watershed Management Program must include a Reasonable Assurance Analysis (RAA) that is quantitative and performed using a peer-reviewed model in the public domain. Models to be considered for the RAA, without exclusion, are the Watershed Management Modeling System (WMMS), Hydrologic Simulation Program-FORTRAN (HSPF), and the Structural BMP Prioritization and Analysis Tool (SBPAT). The RAA shall commence with assembly of all available, relevant subwatershed data collected within the last 10 years, including land use and pollutant loading data, establishment of quality assurance/quality control (QA/QC) criteria, QA/QC checks of the data, and identification of the data set meeting the criteria for use in the analysis. Data on performance of watershed control measures needed as model input shall be drawn only from peer-reviewed sources. These data shall be statistically analyzed to determine the best estimate of performance and the confidence limits on that estimate for the pollutants to be evaluated. The objective of the RAA shall be to demonstrate the ability of Watershed Management Programs and enhanced Watershed Management Programs to ensure that Permittees' MS4 discharges achieve applicable water quality based effluent limitations and do not cause or contribute to exceedances of receiving water limitations. A Permittee's full compliance with all requirements and dates for their achievement in an approved Watershed Management Program or enhanced Watershed Management Program constitutes compliance with receiving water limitations in Part V.A. of the Order for the specific water body-pollutant combinations addressed by an approved Watershed Management Program or enhanced Watershed Management Program. However, if a Permittee fails to meet any requirement or date for its achievement in an approved Watershed Management Program or enhanced Watershed Management Program, the Permittee is subject to the provisions of Part V.A. for the waterbody-pollutant combination(s) that were to be addressed by the requirement. Permittees that do not elect to develop a Watershed Management Program are required to demonstrate compliance with receiving water limitations pursuant to Part V.A. will work with the MS4 Permittees through the process outlined in Part V.A.3 in this Order or the prioritization and adaptive management processes in Permittees' watershed management programs (which mirror the iterative

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~~process in Part V.A.3), so that additional controls are implemented in an expeditious manner to address exceedances of receiving water limitations that are caused or contributed to by discharges from the MS4. Generally, to comply with Part V.A.3, the Regional Water Board expects that MS4 Permittees will address isolated exceedances of receiving water limitations through the screening of MS4 outfalls for significant non-storm water discharges and subsequent source identification (including monitoring and comparison to non-storm water action levels, where appropriate) and elimination actions and through its illicit connection/illicit discharges elimination program. For persistent exceedances of receiving water limitations, the Regional Water Board expects that MS4 Permittees will comply with Part V.A.3 by first undertaking a detailed source assessment in the contributing drainage area as part of its watershed management program (as required by Part VI.C.3.a.iii of this Order), and identifying and implementing additional BMPs and other control measures (as required by Parts VI.C.3.b and VI.C.4 of this Order). The detailed source assessment and identification of BMPs and control measures may also be conducted during the adaptive management process of the watershed management program in response to exceedances of receiving water limitations that occur between the initial development of the watershed management program and the first evaluation of program effectiveness.~~

VI. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR section 122.42, are provided in Attachment D. Dischargers must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR section 122.42.

B. Watershed Management Programs

The purpose of the Watershed Management Programs is to provide a framework for Permittees to implement the requirements of this Order in an integrated and collaborative fashion to address water quality priorities on a watershed scale, including complying with the requirements of Part V.A. (Receiving Water Limitations), Part VI.E (Total Maximum Daily Load Provisions) and Attachments L through R, by customizing the control measures in Parts III.A.4 (Prohibitions – Non-Storm Water Discharges) and VI.D (Minimum Control Measures). This watershed management paradigm is consistent with federal regulations that support the development of permit conditions, as well as the implementation of storm water management programs, at a watershed scale (40 CFR §§ 122.26(a)(3)(ii), 122.26(a)(3)(v), and 122.26(d)(2)(iv)). USEPA later issued a Watershed-Based NPDES Permitting Policy Statement (USEPA, 2003) that defines watershed-based permitting as an approach that produces NPDES permits that are issued to point sources on a geographic or watershed basis. In this policy statement, USEPA explains that, “[t]he utility of this tool relies heavily on a detailed, integrated, and inclusive watershed planning process.” USEPA identifies a number of important benefits of watershed permitting, including more environmentally effective results; the ability to emphasize measuring the effectiveness of targeted actions on improvements in water

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quality; reduced cost of improving the quality of the nation’s waters; and more effective implementation of watershed plans, including TMDLs, among others.

There are several reasons for this shift in emphasis from Order No. 01-182. A watershed based structure for permit implementation is consistent with TMDLs developed by the Los Angeles Water Board and USEPA, which are established at a watershed or subwatershed scale and are a prominent new part of this Order. Many of the Permittees regulated by this Order have already begun collaborating on a watershed scale to develop monitoring and implementation plans required by TMDLs. Additionally, a watershed based structure comports with the recent amendment to the Los Angeles County Flood Control Act (Assembly Bill 2554 in 2010), which allows the LACFCD to assess a parcel tax for storm water and clean water programs. Funding is subject to voter approval in accordance with Proposition 218. Fifty percent of funding is allocated to nine “watershed authority groups” to implement collaborative water quality improvement plans.

An emphasis on watersheds is appropriate at this stage in the region’s MS4 program to shift the focus of the Permittees from rote program development and implementation to more targeted, water quality driven planning and implementation. Addressing MS4 discharges on a watershed scale focuses on water quality results by emphasizing the receiving waters within the watershed. The conditions of the receiving waters drive management actions, which in turn focus on the measures to address pollutant contributions from MS4 discharges.

The ultimate goal of the Watershed Management Programs is to ensure that discharges from the Los Angeles County MS4: (i) achieve applicable WQBELs that implement TMDLs, (ii) do not cause or contribute to exceedances of receiving water limitations, and (iii) for non-storm water discharges from the MS4, are not a source of pollutants to receiving waters.

After more than 20 years of program implementation, it is critical that the Permittees design and implement their programs based on their improved knowledge of storm water and its impacts on local receiving waters and by employing BMPs and other control measures that have been developed and refined over the past two decades. The Watershed Management Programs are driven by strategic planning and implementation, which will ultimately result in more cost effective implementation. The Watershed Management Programs will provide permittees with the flexibility to prioritize and customize control measures to address the water quality issues specific to the watershed management area (WMA), consistent with federal regulations (40 CFR § 122.26(d)(2)(iv)).

Focusing on watershed implementation does not mean that the Permittees must expend funds outside of their jurisdictions. Rather, the Permittees within each watershed are expected to collaborate to develop a watershed strategy to address the high priority water quality problems within each watershed. They have the option of implementing the strategy in the manner they find to be most effective. Each Permittee can implement the strategy individually within its jurisdiction, or the Permittees can group together to implement the strategy throughout the watershed.

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While this Order includes a new emphasis on addressing MS4 discharges on a watershed basis, this Order includes recognition of the importance of continued program implementation on jurisdictional levels. This Order also acknowledges that jurisdictional and watershed efforts may be integrated to achieve water quality outcomes.

In this Order, the watershed requirements serve as the mechanism for this program integration. Since jurisdictional activities also serve watershed purposes, such activities can be integrated into the Permittees' watershed management programs. Such opportunities for program integration inherently provide flexibility to the Permittees in implementing their programs. Program integration can be expanded or minimized as the Permittees see fit. Some Permittees may opt to continue jurisdiction-specific implementation for certain programs, while for other program areas more collaborative watershed scale implementation may be more effective. Permittees identify individual roles and responsibilities as part of the Watershed Management Program Plan.

Permittees can customize the BMPs to be implemented, or required to be implemented, for development, construction, and existing development areas. Flexibility to determine which industrial or commercial sites are to be inspected is also provided to the Permittees. Educational approaches are also to be determined by the Permittees under this Order. Significant leeway is also provided to the Permittees in using methods to assess the effectiveness of their various runoff management programs. This flexibility is further extended to the monitoring program requirements, which allow the Permittees to develop monitoring approaches to several aspects of the monitoring program.

The challenge in drafting this Order is to provide the flexibility described above, while ensuring that this Order provides baseline requirements and is still enforceable. To achieve this, this Order frequently prescribes baseline or default requirements, such as for each of the six "minimum control measures" within a Permittee's baseline storm water management program, while providing the Permittees with flexibility to propose customized actions as part of their watershed management program.

Permittees that elect to develop a Watershed Management Program must submit a "Notice of Intent" to the Regional Water Board no later than six months after the effective date of this Order. The Notice of Intent must be signed by all Permittees electing to participate in the Watershed Management Program for the Watershed Management Area. Permittees that do not elect to develop a Watershed Management Program are subject to the baseline storm water management program requirements in this Order and must demonstrate compliance with applicable WQBELs through monitoring data collected from the Permittee's outfall(s).

Permittees electing to develop a Watershed Management Program must submit a draft plan for approval by the Regional Water Board Executive Officer no later than one year after the effective date of this the Order, or if certain conditions are met, no later than 18 months after the effective date of the Order.

Each Watershed Management Program must:

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1. Prioritize water quality issues resulting from storm water and non-storm water discharges to the MS4 and from the MS4 to receiving waters within each Watershed Management Area,
2. Identify and implement strategies, control measures, and BMPs to achieve applicable water quality based effluent limitations and/or receiving water limitations, consistent with applicable compliance schedules in this Order,
3. Execute an integrated monitoring and assessment program to determine progress towards achieving applicable limitations, and
4. Modify strategies, control measures, and BMPs as necessary based on analysis of monitoring data collected pursuant to the MRP to ensure that applicable water quality-based effluent limitations and receiving water limitations and other milestones set forth in the Watershed Management Program will be achieved~~Revise strategies, control measures, and BMPs as necessary to maintain progress towards achieving applicable limitations.~~

Watershed Management Programs must be developed using the Regional Water Board's Watershed Management Areas (see Attachments B and C of this Order). Where appropriate, Watershed Management Areas may be separated into subwatersheds to focus water quality prioritization and implementation efforts by receiving water, or to align Permittee groups with "watershed authority groups" designated in the Los Angeles County Flood Control Act, so long as the Permittees implement all TMDL provisions for which they are identified as a responsible Permittee.

Permittees must identify the water quality priorities within each Watershed Management Area that will be addressed by the Watershed Management Program consistent with 40 CFR section 122.26(d)(2)(iv). At a minimum, these priorities must include achieving applicable water quality based effluent limitations and/or receiving water limitations established pursuant to TMDLs and included in this Order.

Each plan must include an evaluation of existing water quality conditions, including characterization of storm water and non-storm water discharges from the MS4 and receiving water quality, consistent with 40 CFR §§ 122.26(d)(1)(iv) and 122.26(d)(2)(iii), to support identification and prioritization/sequencing of management actions.

On the basis of the evaluation of existing water quality conditions, water body-pollutant combinations must be classified into one of the following three categories:

- Category 1 (Highest Priority): Water body-pollutant combinations for which water quality based effluent limitations and/or receiving water limitations are included in this Order to implement TMDLs.
- Category 2 (High Priority): Pollutants for which data indicate water quality impairment in the receiving water according to the State's Listing Policy and for which MS4 discharges may be causing or contributing to the impairment.
- Category 3 (Medium Priority): Pollutants for which there are insufficient data to indicate water quality impairment in the receiving water according to the State's Listing Policy, but which exceed applicable receiving water limitations contained in

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this Order and for which MS4 discharges may be causing or contributing to the exceedance water quality standards.

Utilizing existing information, potential sources within the watershed for the pollutants in Categories 1 and 2 must be identified, consistent with 40 CFR sections 122.26(d)(1)(iii) and 122.26(d)(2)(ii). Permittees must identify known and suspected storm water and non-storm water pollutant sources in discharges to the MS4 and from the MS4 to receiving waters and any other stressors related to MS4 discharges causing or contributing to the highest water quality priorities (Categories 1 and 2).

Based on the findings of the source assessment, the issues within each watershed must be prioritized and sequenced. Factors that must be considered in establishing watershed priorities include:

1. Pollutants for which there are water quality based effluent limitations and/or receiving water limitations with interim or final compliance deadlines within the permit term.
2. Pollutants for which there are water quality based effluent limitations and/or receiving water limitations with interim or final compliance deadlines between October 26, 2012 and October 25, 2017.
3. Pollutants for which data indicate impairment in the receiving water and the findings from the source assessment implicates discharges from the MS4, but no TMDL has been developed.

Permittees must identify strategies, control measures, and BMPs to implement through their jurisdictional storm water management programs, or collectively on a watershed scale, with the goal of creating an efficient program to focus individual and collective resources on watershed priorities.

The following provisions of this Order may be part of the Watershed Control Measures within a Watershed Management Program:

1. **Minimum Control Measures.** Permittees may assess the minimum control measures (MCMs) as defined in this Order to identify opportunities for focusing resources on the high priority issues in each watershed. For each of the following minimum control measures, Permittees may propose modifications that will achieve equivalent pollutant control given watershed priorities:
 - a. Development Construction Program
 - b. Industrial/Commercial Program
 - c. Illicit Connection/Illicit Discharge Detection and Elimination Program
 - d. Public Agency Activities Program
 - e. Public Information and Participation Program
2. **Non-Storm Water Discharge Measures.** Where Permittees identify non-storm water discharges from the MS4 as a source of pollutants in the source assessment, the Watershed Control Measures must include strategies, control measures, and/or BMPs that will be implemented to effectively eliminate the source of pollutants.

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These may include measures to prohibit the non-storm water discharge to the MS4, additional BMPs to reduce pollutants in the non-storm water discharge or conveyed by the non-storm water discharge, or strategies to require the non-storm water discharge to be separately regulated under a general NPDES permit.

3. TMDL Control Measures. Permittees must compile control measures that have been identified in TMDLs and corresponding implementation plans. If not sufficiently identified in previous documents, or if implementation plans have not yet been developed (e.g., EPA promulgated TMDLs), the Permittees must evaluate and identify control measures to achieve water quality based effluent limitations and/or receiving water limitations established in this Order pursuant to these TMDLs.
 - a. TMDL control measures must include, where necessary, control measures to address both storm water and non-storm water discharges from the MS4.
 - b. TMDL control measures may include activities covered under the MCMs as well as BMPs and other control measures covered under the non-stormwater discharge provisions of this Order.
 - c. TMDL control measures must include, at a minimum, those actions that will be implemented during the permit term to achieve interim and/or final water quality based effluent limitations and/or receiving water limitations with compliance deadlines within the permit term.

Pursuant to 40 CFR sections 124.8, 124.9, and 124.18, ~~As~~ as part of the Watershed Management Program plan, Permittees must conduct a Reasonable Assurance Analysis for each TMDL that consists of an assessment (through quantitative analysis or modeling) to demonstrate that the activities and control measures (i.e. BMPs) identified in the Watershed Control Measures will achieve applicable water quality based effluent limitations and/or receiving water limitations with compliance deadlines during the permit term.

Permittees must incorporate and, where necessary develop, numeric milestones and compliance schedules into the plan consistent with 40 CFR section 122.47(a). Numeric milestones and schedules shall be used to measure progress towards addressing the highest water quality priorities and achieving applicable water quality based effluent limitations and/or receiving water limitations. Where the TMDL Provisions do not include interim or final water quality based effluent limitations and/or receiving water limitations with compliance deadlines during the permit term, Permittees must identify interim numeric milestones and compliance schedules to ensure significant progress toward achieving interim and final water quality based effluent limitations and/or receiving water limitations with deadlines beyond the permit term (40 CFR § 122.47(a)(3)).

Schedules must be developed for both the strategies, control measures and BMPs to be implemented by each individual Permittee within its jurisdiction and for those that will be implemented by multiple Permittees on a watershed scale. Schedules must be adequate for measuring progress at least twice during the permit term. Schedules must incorporate the following:

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1. Compliance deadlines occurring within the permit term for all applicable interim and/or final water quality based effluent limitations and/or receiving water limitations to implement TMDLs,
2. Interim deadlines and numeric milestones within the permit term for any applicable final water quality based effluent limitation and/or receiving water limitation to implement TMDLs, where deadlines within the permit term are not otherwise specified,
3. For watershed priorities related to addressing exceedances of receiving water limitations in Part V.A and not otherwise addressed by Part VI.E~~not related to implementing TMDL provisions:~~
 - a. Numeric milestones based on measureable criteria or indicators, to be achieved in the receiving waters and/or MS4 discharges,
 - b. A schedule with interim and final dates for achieving the numeric milestones ~~as soon as possible~~, and
 - c. Final dates for achieving the receiving water limitations ~~within the permit term~~ as soon as possible.

Each Permittee must implement the Watershed Management Program immediately after determination by the Regional Water Board Executive Officer that the Watershed Management Program meets the requirements of this Order.

Clean Water Act section 402(a)(2) requires the permitting authority to prescribe conditions for MS4 permits to assure compliance, including conditions on data and information collection, reporting, and such other requirements as appropriate. Consistent with this requirement, Permittees in each Watershed Management Area must develop an integrated program to assess the progress toward achieving the water quality based effluent limitations and/or receiving water limitations per the compliance schedules, and the progress toward addressing the highest water quality priorities for each Watershed Management Area. The integrated watershed monitoring and assessment program may be customized, but must include the monitoring and assessment requirements contain the basic elements (receiving water monitoring, storm water outfall monitoring, non-storm water outfall monitoring, new development/re-development effectiveness tracking and regional studies), and achieve the objectives of, the Monitoring and Reporting Program (MRP) (Attachment E of this Order).

Permittees in each Watershed Management Area must implement ~~the iterative~~ an adaptive management process, at least twice during the permit term, adapting the Watershed Management Program to become more effective, based on, but not limited to the following:

1. Progress toward achieving the outcome of improved water quality in MS4 discharges and receiving waters through implementation of the watershed control measures;

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2. Progress toward achieving interim and/or final water quality based effluent limitations and/or receiving water limitations, or other numeric milestones where specified, according to established compliance schedules;
3. Re-evaluation of the highest water quality priorities identified for the Watershed Management Area based on more recent water quality data for discharges from the MS4 and the receiving water(s) and a reassessment of sources of pollutants in MS4 discharges;
4. Availability of new information and data from sources other than the Permittees' monitoring program(s) within the Watershed Management Area that informs the effectiveness of the actions implemented by the Permittees;
5. Regional Water Board recommendations; and
6. Recommendations for modifications to the Watershed Management Program solicited through a public participation process, consistent with 40 CFR section 122.26(d)(2)(iv).

Based on the results of the iterative process, Permittees are required to report any modifications necessary to improve the effectiveness of the Watershed Management Program in the Annual Report, and as part of the Report of Waste Discharge (ROWD). Permittees must implement any modifications to the Watershed Management Program upon acceptance by the Regional Water Board Executive Officer.

C. Storm Water Management Program Minimum Control Measures (MCMs)

1. General Requirements

a. Basis for MCMs. 40 CFR section 122.26(d)(2)(iv) establishes required elements of the Permittees' storm water management program. The previous permit, Order No. 01-182, included six categories of minimum control measures that are considered to be baseline or default requirements for meeting the requirements of 40 CFR section 122.26(d)(2)(iv). These requirements were determined appropriate within Order No. 01-182 and again appropriate for this Order. The minimum control measures require Permittees to implement BMPs that are considered necessary to reduce pollutants in storm water to the MEP and to effectively prohibit non-storm water discharges. In lieu of implementing the MCMs as described in Part VI of this Order, this Order allows for Permittees to develop alternative BMPs to comply with 40 CFR section 122.26(d)(2)(iv), when implemented through a Watershed Management Program approved by the Executive Officer of the Regional Water Board.

b. Timelines for Implementation

The timelines for implementation of most MCMs contained in Part VI.D of this Order is provided in Table F-5 below. Where implementation dates for minimum

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control measures are not provided in the Table, Part VI.D.1.b requires implementation within ~~30 days~~ 6 months of the effective date this Order. Unless otherwise noted in Part VI.D of the Order, each Permittee that does not elect to develop a Watershed Management Program or enhanced Watershed Management Program per Part VI.C must implement the requirements contained in Part VI.D within 6 months after the effective date of this Order. In the interim, a Permittee shall continue to implement its existing storm water management program, including actions within each of the six categories of minimum control measures consistent with 40 CFR section 122.26(d)(2)(iv).

Permittees that elect to develop a Watershed Management Program or enhanced Watershed Management Program shall continue to implement their existing storm water management programs, including actions within each of the six categories of minimum control measures consistent with 40 CFR section 122.26(d)(2)(iv) until the Watershed Management Program or enhanced Watershed Management Program is approved by the Regional Water Board Executive Officer.~~All obligations continue the implementation of existing MS4 program requirements.~~ The Table below denotes the timeframe for requirements as well as the basis of those timeframes. The majority of the timeframes are consistent with Order No. 01-182 as well as other area permits including the Ventura County MS4 Permit and the State Water Board’s Construction General NPDES Permit. The timeframe for notifications, submittals, and attaining compliance with permit requirements are determined to be the earliest practicable periods and ensure timely measures for protection of water quality.

Table F-5. Timeline for the Implementation of Permit Requirements

Part Number	Requirement Summary	Timeframe	Basis for Timeframe
Discharge Prohibitions			
III.A.2.a.ii	Potable water suppliers must notify MS4 Permittee if intend to discharge to the Permittee’s MS4.	At least 72 hours prior to a planned discharge and as soon as possible after an unplanned discharge.	Allows for advanced notice and sampling, if warranted.
III.A.4.e	If the Permittee determines that any of the authorized or conditionally exempt essential non-storm water discharges identified in Parts III.A.1.a through III.A.1.c, III.A.2.a or III.A.3 is a source of pollutants, notify the Regional Water Board if the non-storm water discharge has coverage under a separate NPDES permit or subject to a Record of Decision (ROD) approved under section 121 of CERCLA, or a conditionally exempt essential non-storm water discharge or emergency non-storm water discharge.	Within 30 days of determination.	The language in the previous LA MS4 permit, Order No. 01-182, states “promptly.” The specification of a 30 day deadline is considered reasonable and the earliest practicable deadline to ensure the protection of water quality.
Table III.A	<u>Dewatering of Lakes</u> – Ensure procedures for advanced notification by the lake owner/operator to the Permittee(s).	At least 72 hours in advance of discharge.	Allows for advanced notice and sampling, if warranted.

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Part Number	Requirement Summary	Timeframe	Basis for Timeframe
Table III.A	<u>Dechlorinated/debrominated swimming pool/spa discharges</u> – Ensure procedures for advanced notification by the pool owner to the Permittee(s) prior to planned discharges of one acre-foot <u>100,000 gallons</u> or more.	At least 72 hours in advance of discharge.	Allows for advanced notice and sampling, if warranted.
Table III.A	<u>Dewatering of decorative fountains</u> – Ensure procedures for advanced notification by the fountain owner to the Permittee(s) prior to planned discharges of one acre-foot <u>100,000 gallons</u> or more.	At least 72 hours in advance of discharge.	Allows for advanced notice and sampling, if warranted.
Receiving Water Limitations			
V.A.3.a	Upon determination by either the Permittee or the Regional Water Board that discharges from the MS4 are causing or contributing to an exceedance of an applicable Receiving Water Limitation, the Permittee shall notify the Regional Water Board within 30 days of analytical results and thereafter submit an Integrated Monitoring Compliance Report within the next Annual Report.	Within 30 days of receipt of analytical results from the sampling event.	The language in the current LA MS4 permit reads “promptly.” The specification of a 30 day deadline is considered reasonable and the earliest practicable deadline to ensure the protection of water quality.
V.A.3.b	Submit any modifications to the Integrated Monitoring Compliance Report required by the Regional Water Board	Within 30 days notification from the Regional Water Board.	This is consistent with Order No. 01-182
V.A.3.c	Permittee shall revise its control measures and monitoring program to incorporate the improved modified BMPs that will be implemented, an implementation schedule, and any additional monitoring required.	Within 30 days following Regional Water Board Executive Officer’s approval of the Integrated Monitoring Report.	Allows for adequate time to make modifications.
Provisions			
VI.A.2.j	Discharger shall file with the Regional Water Board a report of waste discharge before making any material change or proposed change in the character, location, or volume of the discharge.	At least 120 days prior to any change.	Standard language.
Special Provisions: Watershed Management Programs			
VI.C.2.b	Permittees that elect to develop a Watershed Management Program must notify the Regional Water Board.	No later than 6 months after the date this Order is adopted.	This provides a reasonable amount of time to determine participation in a WMP, but also ensure adequate time for implementation of watershed scale control measures during the term of this Order.
VI.C.2.c	Permittees that elect to develop a Watershed Management Program	No later than 18 year <u>months</u> after the date this	This provides a reasonable amount of time to

Part Number	Requirement Summary	Timeframe	Basis for Timeframe
	shall submit a draft plan to the Regional Water Board Executive Officer.	Order is adopted.	complete the plan but also ensure effective monitoring during the term of this Order.
VI.C.6.a.i	Permittees in each Watershed Management Area shall implement an adaptive management process adapting the Watershed Management Program to become more effective.	At least twice during the permit term.	This encourages application of the iterative approach.
VI.C.6.b.i	Permittees in the Watershed Management Area shall implement the adaptive management process with regard to its jurisdictional storm water management program to improve its effectiveness.	At least annually.	This encourages application of the iterative approach.
Special Provisions: Minimum Control Measures			
VI.D.2.a.i	<u>Progressive Enforcement and Interagency Coordination</u> – In the event that a Permittee determines that a facility or site operator has failed to adequately implement all necessary BMPs, that Permittee shall take progressive enforcement which shall include a follow-up inspection.	Follow-up inspection within 4 weeks from the date of the initial inspection and/or investigation.	This is consistent with the current LA MS4 permit.
VI.D.2.b	<u>Progressive Enforcement and Interagency Coordination</u> – Each Permittee shall initiate investigation of complaints from facilities within its jurisdiction.	Initiate investigation within one business day of complaint.	This is consistent with Order No. 01-182.
VI.D.45.b.ii	<u>Public Information and Participation Program</u> – If participating in a County-wide or Watershed Group PIPP, provide contact information for their appropriate staff responsible for storm water public education activities to the designated PIPP coordinator and contact information changes.	No later than 30 days after a change occurs.	This is consistent with Order No. 01-182 for contact changes, which directs contact changes be sent to Los Angeles County by May 1, 2002. However, with the elimination of the Principal Permittee in this Order, it is more appropriate to direct any contact information changes directly to the PIPP coordinator.
VI.D.56.b.iii	<u>Industrial/Commercial Business Program</u> – Each Permittee shall update its inventory of critical sources.	Update at least annually.	Business turn-over can be significant thus an active inventory is required.
VI.D.56.c.i	<u>Industrial/Commercial Business Program</u> – Each Permittee shall notify the owner/operator of each of its inventoried commercial and industrial sites identified in Part VI.D.5.b of this Order of the BMP requirements applicable.	Notify at least once during the five-year period of this Order.	This is required so that the owner/operator remains informed and vigilant about BMP implementation.
VI.D.56.d.i	<u>Industrial/Commercial Business</u>	Provided that the first	Order No. 01-182 required

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Part Number	Requirement Summary	Timeframe	Basis for Timeframe
	<u>Program</u> – Each Permittee shall inspect all commercial facilities identified in Part VI.D.5.b of this Order twice during the 5-year term of this Order with a minimum interval of 6 months between the first and second mandatory compliance inspection required.	mandatory compliance inspection occurs no later than 2 years after the date this Order is adopted.	initial implementation by August 2004 (or a little over 2.5 years), however the 2 year requirement contained in this Order is considered reasonable and the earliest practicable deadline to ensure the protection of water quality.
VI.D.56.e.i.(1)	<u>Industrial/Commercial Business Program</u> – Each Permittee shall perform an initial compliance inspection of all industrial facilities identified in Part VI.D.5.b.of this Order	No later than 2 years after the date this Order is adopted.	Order No. 01-182 required initial implementation by August 2004 (or a little over 2.5 years). However, the 2 year requirement contained in this Order is considered reasonable and the earliest practicable deadline to ensure the protection of water quality.
VI.D.56.e.i.(2)	<u>Industrial/Commercial Business Program</u> – Each Permittee shall review the State Water Board’s Storm Water Multiple Application and Report Tracking System (SMARTS) database at defined intervals to determine if an industrial facility has been recently inspected by the Regional Water Board. The Permittee does not need to inspect the facility if it is determined that the Regional Water Board conducted an inspection of the facility within the prior 24 month period.	The first interval shall occur approximately 2 years after the date this Order is adopted. The second interval shall occur approximately 4 years after the date this Order is adopted.	This specific requirement for inspecting facilities within certain intervals is a new requirement, but is considered consistent with Order No. 01-182.
VI.D.56.e.i.(3)	<u>Industrial/Commercial Business Program</u> – Each Permittee shall evaluate its inventory of industrial facilities and perform a second mandatory compliance inspection at a minimum of 25% of the facilities identified to have filed a No Exposure Certification.	Approximately 3 to 4 years after the date this Order is adopted.	This is consistent Order No. 01-182.
VI.D.67.c.iii.(45). (f)	<u>Planning and Land Development Program</u> – Each Permittee shall develop a schedule for the completion of offsite projects, including milestone dates to identify, fund, design, and construct the projects.	Offsite projects shall be completed as soon as possible, and at the latest within 4 years of the certificate of occupancy for the first project that contributed funds toward the construction of the offsite project.	This requirement is consistent with the provisions contained in the Ventura County Redevelopment Project Area Master Plan (RPAMP).
VI.D.67.ed.iv.(21). (b)(c)	<u>Planning and Land Development Program</u> – <u>Each Permittee shall maintain a database providing key information for each new development/re-development subject to the requirements of Part</u>	<u>Each Permittee shall implement a tracking system and an inspection and enforcement program for new development and redevelopment post-</u>	<u>Monitoring-Effectiveness tracking</u> of the treatment system is warranted and will also help to ensure adequate maintenance.

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Part Number	Requirement Summary	Timeframe	Basis for Timeframe
	<p>VI.D.6 of this Order Each Permittee may determine, based on data from its storm water outfall based monitoring program (Attachment E Part VIII.A.), that the discharge is not causing an exceedance of water quality standards. In this scenario, the Permittee shall require the project proponent to monitor the treatment system discharge and report data to the Permittee for inclusion in its Annual Report.</p>	<p>construction storm water no later than 60 days after Order adoption date. Monitor the treatment system discharge during the year's first precipitation event during the first two years after completion.</p>	
<p>VI.D.67.d.i</p>	<p><u>Planning and Land Development Program</u> – A local LID ordinance that fully incorporated the applicable requirements of this Order shall be submitted to the Executive Officer of the Regional Water Board for approval.</p>	<p>Within 180 days after the date this Order is adopted.</p>	<p>The requirement is deemed acceptable due to the large number of existing LID ordinances within the Permittees and the varied number of templates available nationally.</p>
<p>VI.D.67.d.iii.(1). a).(ii)</p>	<p><u>Planning and Land Development Program</u> – Written conditions in the sales or lease agreement, which require the property owner or tenant to assume responsibility for BMP maintenance and conduct a maintenance inspection.</p>	<p>At least once a year.</p>	<p>This is consistent with the current Ventura County MS4 permit.</p>
<p>VI.D.67.d.iv</p>	<p><u>Planning and Land Development Program</u> – Each Permittee shall implement a tracking system and an inspection and enforcement program from new development and redevelopment post-construction storm water BMPs.</p>	<p>No later than 60 days after the date this Order is adopted.</p>	<p>A tracking system is deemed critical to the success of this MCM. Additionally, a tracking system need not be complex and can, and has, been developed using spreadsheets or equivalent.</p>
<p>VI.D.67.d.iv.(1). c).(ii)</p>	<p><u>Planning and Land Development Program</u> – Inspection of post-construction BMPs to assess operation conditions with particular attention to criteria and procedures for post-construction treatment control and hydromodification control BMP repair, replacement, or re-vegetation.</p>	<p>Inspection at least once every 2 years after project completion.</p>	<p>This is consistent with the current Ventura County MS4 permit.</p>
<p>VI.D.78.j.ii.(1)</p>	<p><u>Development Construction Program</u> – Inspect public and private construction sites 1 acre or larger that discharge to a tributary listed by the state as an impaired water for sediment or turbidity under CWA § 303(d).</p>	<p>When two or more consecutive days with greater than 50% chance of rainfall are predicted by NOAA, within 48 hours of a 1/2-inch rain event, and at least once every two weeks.</p>	<p>This requirement is consistent with the current State Water Board's General NPDES Construction Permit Requirements.</p>
<p>VI.D.78.j.ii.(1)</p>	<p><u>Development Construction Program</u> – Inspect public and private construction sites 1 acre or larger</p>	<p>When two or more consecutive days with greater than 50% chance</p>	<p>This requirement is consistent with the current State Water Board's</p>

Part Number	Requirement Summary	Timeframe	Basis for Timeframe
	determined to be a significant threat to water quality.	of rainfall are predicted by NOAA, within 48 hours of a ½-inch rain event, and at least once every two weeks.	General NPDES Construction Permit Requirements.
VI.D.78.j.ii.(1)	<u>Development Construction Program</u> – Inspect public and private construction sites 1 acre or larger that do not meet other criteria in Part VI.D.7.j.ii.(1) of this Order.	At least monthly.	This requirement is consistent with the current General Construction Permit Requirements.
VI.D.89.c.iii	<u>Public Agency Activities Program</u> – Each Permittee shall update its facility inventory.	At least twice once during the term of this Order.	This requirement is deemed reasonable because site conditions can change at existing facilities.
VI.D.89.h.iii.(2)	<u>Public Agency Activities Program</u> – In areas that are not subject to a trash TMDL, each Permittee shall inspect Priority A catch basins.	A minimum of 3 times during the wet season (October 1 through April 15) and once during the dry season every year.	This is consistent with Order No. 01-182.
VI.D.89.h.iii.(2)	<u>Public Agency Activities Program</u> – In areas that are not subject to a trash TMDL, each Permittee shall inspect Priority B catch basins.	A minimum of once during the wet season and once during the dry season every year.	This is consistent with Order No. 01-182.
VI.D.89.h.iii.(2)	<u>Public Agency Activities Program</u> – In areas that are not subject to a trash TMDL, each Permittee shall inspect Priority C catch basins.	A minimum of once per year.	This is consistent with Order No. 01-182.
VI.D.89.h.iv.(1).(c)	<u>Public Agency Activities Program</u> – Provide clean out of catch basins, trash receptacles, and grounds in the event area.	Within 24 hours <u>one business day</u> subsequent to the event.	This is consistent with the current Ventura County MS4 permit.
VI.D.8.h.vi.(2)	<u>Public Agency Activities Program</u> – Each Permittee shall inspect the legibility of the stencil or label nearest each inlet.	Prior to the wet season every year.	This is consistent with Order No. 01-182.
VI.D.89.h.vi.(3)	<u>Public Agency Activities Program</u> – Each Permittee shall record all catch basins with illegible stencils and re-stencil or re-label.	Within 180 days of inspection.	This is consistent with Order No. 01-182.
VI.D.89.h.vii.(1)	<u>Public Agency Activities Program</u> – In areas that are not subject to a trash TMDL, each Permittee shall install trash excluders, or equivalent devices, on or in catch basins or outfalls, except at sites where the application of such BMPs alone will cause flooding.	No later than 2-4 years after the date this Order is adopted in areas specified as Priority A.	This is based on the <u>current Ventura County MS4 permit</u> , but due to the <u>significant number of catch basins in Los Angeles County compared to Ventura County</u> the time frame was lengthened. This is consistent with the <u>current Ventura County MS4 permit</u> .
VI.D.89.h.viii.(1)	<u>Public Agency Activities Program</u> – Visual monitoring of Permittee-owned open channels and other drainage structures, including debris basins, for debris.	At least annually.	This is consistent with Order No. 01-182.

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Part Number	Requirement Summary	Timeframe	Basis for Timeframe
VI.D.89.h.viii.(2)	<u>Public Agency Activities Program</u> – Removal of trash and debris from open channels, and debris basins.	A minimum of once per year before the wet season.	This is consistent with Order No. 01-182.
VI.D.89.i.ii	<u>Public Agency Activities Program</u> – Each Permittee shall perform street sweeping of curbed streets for Priority A areas.	Swept at least two times per month.	This is consistent with Order No. 01-182.
VI.D.89.i.ii	<u>Public Agency Activities Program</u> – Each Permittee shall perform street sweeping of curbed streets for Priority B areas.	Swept at least once per month.	This is consistent with Order No. 01-182.
VI.D.89.i.ii	<u>Public Agency Activities Program</u> – Each Permittee shall perform street sweeping of curbed streets for Priority C areas.	Swept as necessary but in no case less than once per year.	This is consistent with Order No. 01-182.
VI.D.89.i.iv.(1)	<u>Public Agency Activities Program</u> – Permittee-owned parking lots exposed to storm water shall be kept clear of debris and excessive oil buildup and cleaned using street sweeping equipment.	No less than 2 times per month and/or inspected no less than 2 times per month to determine if cleaning is necessary. In no case shall a Permittee-owned parking lot be cleaned less than once a month.	This is consistent with Order No. 01-182.
VI.D.89.j.i.(2)	<u>Public Agency Activities Program</u> – Where the self-waiver has been invoked, the Permittee shall submit to the Regional Water Board Executive Officer a statement of the occurrence of the emergency, an explanation of the circumstances, and the measures that were implemented to reduce the threat to water quality.	No later than 30 business days after the situation of emergency has passed.	This is consistent with the current Ventura County MS4 permit.
VI.D.89.k.i	<u>Public Agency Activities Program</u> – Each Permittee shall train <u>or ensure training of</u> all of their employees and contractors in targeted positions on the requirements of the overall storm water management program.	No later than 1 year after the date this Order is adopted and annually thereafter before June 30.	Order No. 01-182 allowed for this to be initially completed by August 2002. However, since this implementation of this requirement is continuing from the previous LA MS4 permit, implementation within a year is considered reasonable and the earliest practicable period for implementation. This is consistent with Order No. 01-182 and the current Ventura County MS4 permit.
VI.D.89.k.ii	<u>Public Agency Activities Program</u> – Each Permittee shall train all of their employees and contractors <u>or ensure training for all</u> who use or have the potential to use pesticides or fertilizers.	No later than 1 year after the date this Order is adopted and annually thereafter before June 30.	This is consistent with the current Ventura County MS4 permit.

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Part Number	Requirement Summary	Timeframe	Basis for Timeframe
VI.D.910.b.ii	<u>Illicit Connections and Illicit Discharges Elimination Program</u> – Each Permittee shall initiate investigation(s) to identify and locate the source of an illicit discharge.	Within 72 hours of becoming aware of the illicit discharge.	Order No. 01-182 and the current Ventura County MS4 permit require illicit discharge investigations be initiated within 1 business day. However, the 72 hour requirement takes into account the possibility of weekend spills.
VI.D.910.b.iv.(2)	<u>Illicit Connections and Illicit Discharges Elimination Program</u> – If the source of the illicit discharge has been determined to originate within an upstream jurisdiction, the Permittee shall notify the upstream jurisdiction and the Regional Water Board.	Within 30 days of such determination.	This ensures the ID is addressed in a reasonable period of time by the upstream jurisdiction.
VI.D.910.b.v	<u>Illicit Connections and Illicit Discharges Elimination Program</u> – In the event the Permittee is unable to eliminate an ongoing illicit discharge following full execution of its legal authority and in accordance with its Progressive Enforcement Policy, or other circumstances prevent the full elimination of an ongoing illicit discharge, the Permittee shall work with the Regional Water Board to provide a diversion of the entire flow to the sanitary sewer or provide treatment.	Notify the Regional Water Board within 30 days of such determination and provide a written plan for review and comment.	This ensures the Regional Water Board is effectively engaged in the ultimate disposition of ongoing illicit discharges.
VI.D.910.c.ii	<u>Illicit Connections and Illicit Discharges Elimination Program</u> – Each Permittee, upon discovery or upon receiving a report of a suspected illicit connection, shall initiate an investigation.	Initiate investigation within 21 days of discovery.	This is consistent with Order No. 01-182 and the current Ventura County MS4 permit.
VI.D.910.c.iii.(2)	<u>Illicit Connections and Illicit Discharges Elimination Program</u> – Each Permittee, upon confirmation of an illicit MS4 connection, shall ensure that the connection is eliminated.	Within 180 days of completion of the investigation.	This is consistent with Order No. 01-182 and the current Ventura County MS4 permit.
VI.D.910.e.i.(2)	<u>Illicit Connections and Illicit Discharges Elimination Program</u> – Initiate investigation of all public and employee illicit discharge and spill complaints.	Within 1 business day of receiving the complaint.	This is consistent with Order No. 01-182 and the current Ventura County MS4 permit.
VI.D.910.e.i.(3)	<u>Illicit Connections and Illicit Discharges Elimination Program</u> – Response to spills for containment.	Within 4 hours of becoming aware of the spill, except where such spills occur on private property, in which case should be within 2 hours of gaining legal access to	The requirement that spills be responded to within 4 hours of becoming aware of the spill, except where such spills occur on private property, in which case should be within 2 hours of

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Part Number	Requirement Summary	Timeframe	Basis for Timeframe
		the property.	gaining legal access to the property is the earliest practicable period for implementation and ensures the protection of water quality.
VI.D.910.f.iv	<u>Illicit Connections and Illicit Discharges Elimination Program</u> – Each Permittee must create a list of applicable staff and contractors which require IC/ID training and ensure that training is provided.	At least twice during the term of this Order.	This requirement is new and twice during the term of this Order is considered reasonable and the earliest practicable period for implementation.
VI.D.910.f.v	<u>Illicit Connections and Illicit Discharges Elimination Program</u> – New Permittee staff members must be provided with IC/ID training.	Within 180 days of starting employment.	The current Ventura MS4 permit specifies that within 1 year all employees must be trained. However, the requirement that employees be trained within 180 days of starting employment is the earliest practicable period for implementation and ensures the protection of water quality.

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2. Progressive Enforcement

Progressive enforcement is a series of defined and reproducible enforcement actions whereby consequences of non-compliance increase with each incremental enforcement steps. Progressive enforcement includes procedures to coordinate enforcement between the Regional Water Board and Permittees. As the Regional Water Board is the agency responsible for implementing the NPDES program, it has the authority to step in when enforcement actions of Permittee are unsuccessful in bringing dischargers into compliance with the permit. As such, progressive enforcement is an effective strategy to achieve timely compliance with permit requirements. Order No. 01-182 included requirements for a progressive enforcement strategy that are carried over to this Order, with some modifications. This Order includes supplemental documentation requirements for site acreage and Risk Factor rating, when making a referral to the Regional Water Board for MS4 permit non-compliance of a discharger under the construction general permit. This requirement is necessary information for the Regional Water Board consideration. Moreover, this Order eliminates the provision within Order No. 01-182 that allows the Regional Water Board and Permittees to form a storm water task force. This provision was removed because the ability for coordinated enforcement between the Regional Water Board and Permittees is adequately established through remaining provisions within Part VI.D.2 of this Order.

3. Modifications/Revisions

This Order requires each Permittee to modify its storm water management programs, protocols, practices, and municipal codes to be consistent with this Order.

This provision is necessary to ensure that each Permittee takes all the steps necessary to update the core and ancillary programs that are required to ensure compliance with this Order. A significant change from Order No. 01-182 is that this obligation now rests with each individual Permittee rather than the Principal Permittee.

4. Public Information and Participation Program

a. Legal Authority

NPDES regulation 40 CFR section 122.26(d)(2)(iv)(A)(6) provides that the proposed management program include "A description of a program to reduce to the maximum extent practicable, pollutants in discharges from MS4s associated with the application of pesticides, herbicides, and fertilizer which will include, as appropriate, controls such as educational activities, permits, certifications, and other measures for commercial applicators and distributors, and controls for application in public right-of-ways and at municipal facilities."

NPDES regulation 40 CFR section 122.26(d)(2)(iv)(B)(6) provides that the proposed management program include " A description of education activities, public information activities, and other appropriate activities to facilitate the proper management and disposal of used oil and toxic materials."

To satisfy the Public Education and Outreach minimum control measure, the Permittees need to implement a Public Information and Participation Program (PIPP) that has the following objectives: (1) measurably increase the knowledge of the target audiences about the MS4, the adverse impacts of storm water pollution of receiving waters and potential solutions to mitigate the impacts, (2) measurably change the waste disposal and storm water pollution generation behavior of target audiences by developing and encouraging implementation of appropriate activities, and (3) involve and engage a diversity of socio-economic groups and ethnic communities in Los Angeles County to participate in mitigating the impacts of storm water pollution.

b. Background

Implementation of a PIPP is a critical BMP and a necessary component of a storm water management program. The State Water Board Technical Advisory Committee "recognizes that education with an emphasis on pollution prevention is the fundamental basis for solving nonpoint source pollution problems." The USEPA Phase II Fact Sheet 2.3 (Fact Sheet 2.3) finds that "An informed and knowledgeable community is critical to the success of a storm water management program since it helps insure the following: (i) greater support for the program as the public gains a greater understanding of the reasons why it is necessary and important, and (ii) greater compliance with the program as the public becomes aware of the personal responsibilities expected of them and

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others in the community, including the individual actions they can take to protect or improve the quality of area waters."³¹

Furthermore, the public can provide valuable input and assistance to a municipal storm water management program and, therefore, should play an active role in the development and implementation of the program. An active and involved community is essential to the success of a storm water management program because it allows for:

- Broader public support since residents who participate in the development and decision making process are partially responsible for the program and, therefore, are more likely to take an active role in its implementation;
- Shorter implementation schedules due to fewer obstacles in the form of public and legal challenges and increased sources in the form of residents volunteers;
- A broader base of expertise and economic benefits since the community can be a valuable, and free, intellectual resource; and
- A conduit to other programs as residents involved in the storm water program development process make important cross-connections and relationships with other community and government programs. This benefit is particularly valuable when trying to implement a storm water program on a watershed basis.

c. PIPP Implementation

It is generally more cost-effective to have numerous operators coordinate to use an existing program than each developing its own local programs. Therefore, Permittees are encouraged to participate in a County-sponsored wide PIPP or in one or more Watershed Group sponsored PIPPs supplemented with additional information specific to local needs.

Permittees are required to: (a) conduct storm water pollution prevention public service announcements and advertising campaigns; (b) provide public education materials on the proper handling or potential storm water pollutants; (c) distribute activity specific storm water pollution prevention public education materials to points of purchase; (d) maintain storm water websites or provide links to storm water websites via the Permittees website, which contain educational material and opportunities for the public to participate in storm water pollution prevention and clean-up activities; and (e) provide independent, parochial, and public schools within each Permittee's jurisdiction with materials, including, but not limited to videos, live presentations, and other information. Permittees are required to use effective strategies to educate and involve ethnic communities using culturally effective methods.

³¹ Storm Water Phase II Final Rule - Public Education and Outreach Minimum Control Measure. USEPA Fact Sheet 2.3, January 2000.

The intent of these changes is to provide an increase in public knowledge of storm water pollution prevention practices in an effective and cost efficient manner, while still providing flexibility for the Permittees to implement the requirements on a watershed group basis.

The Order requires outreach to ethnically diverse communities using culturally effective strategies. The USEPA, Tailoring Outreach Programs to Minority and Disadvantaged Communities and Children Fact Sheet finds that, "many residents of ethnically and culturally diverse communities don't speak English. English messages contained in public education outreach materials may not be effectively reaching a significant portion of some communities. The intent of this provision is to encourage behavior changes that reduce pollutants in storm water to a portion of the population who might otherwise be overlooked.

5. Industrial/Commercial Business Program

a. Legal Authority

The Phase I regulations require, in part, that the applicant: (i) develop adequate legal authority, (ii) perform a source identification, and (iii) develop a management program to reduce the discharge of pollutants to the MEP using management practices, control techniques and system design and engineering methods, and such other provisions which are appropriate. Specifically, with regards to industrial controls, the management plan shall include the following.

“A description of a program to monitor and control pollutants in storm water discharges to municipal systems from municipal landfills, hazardous waste treatment, disposal and recovery facilities, industrial facilities that are subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA), and industrial facilities that the municipal permit applicant determines are contributing a substantial pollutant loading to the municipal storm sewer system. The program shall:

- i. Identify priorities and procedures for inspections and establishing and implementing control measures for such discharges.
- ii. Describe a monitoring program for storm water discharges associated with industrial facilities [...].”

(40 CFR section 122.26(d)(2)(iv)(C))

The provisions contained in this Order pertaining to the inspection and facility control program requirements for industrial and commercial facilities, as well as construction sites (as discussed below in Part VI.7.b.) are also based on the requirements found in the previous permit, Order No. 01-182. Those requirements, among others, were the subject of litigation between several permittees and the Regional Water Board. In that case, the Los Angeles County Superior Court upheld the inspection and facility control program requirements for industrial/commercial facilities and construction sites in Order No. 01-182.

The Court determined that “[t]he Permit contains reasonable inspection requirements for these types of facilities. [Citation.] The Permit requires each permittees to confirm that operators of these facilities have a current waste discharge identification number and is effectively implementing Best Management Practices (BMPs) in compliance with County and municipal ordinances, Regional Board Resolution 90-08 and the Stormwater Quality Management Plans (SQMPs). [Citation.] Addressing pollution after it has entered the storm sewer system is not working to meet legislative goals. More work is required at the source of pollution, and that is partially the basis on which this Court finds that the Permit’s inspection requirements are reasonable, and not onerous and burdensome.” (*In re L.A. Cnty. Mun. Storm Water Permit Litig.*, ~~(No. BS 080548)~~ (L.A. Super. Ct., No. BS 080548, Mar. 24, 2005), Statement of Decision from Phase II Trial on Petitions for Writ of Mandate, p. at 17.)

The Court also addressed the permittees’ claims that the requirements in Order No. 01-182 shifted the Regional Water Board’s inspection responsibility under State Water Board issued general NPDES permits for these types of facilities onto the local agencies. The Court disagreed, stating: “The Court agrees with [the Regional Water Board] and Intervenors that the United States EPA considered obligations under state-issued general permits to be separate and distinct. Despite the similarity between the general permits and the local storm water ordinances, both must be enforced. [Citations.] EPA requires permittees to conduct inspections of commercial and industrial facilities, as well as of construction sites. [Citation.].....This Court finds that the state-issued general permits do not preempt local enforcement of local storm water ordinances. (See State Board Order No. 99-08, [citation].) [¶] Therefore, this Court finds that requiring permittees to inspect commercial and industrial facilities and construction sites is authorized under the Clean Water Act, and both the Regional Board and the municipal permittees or the local government entities have concurrent roles in enforcing the industrial, construction and municipal permits. The Court finds that the Regional Board did not shift its inspection responsibilities to Petitioners. [¶] ... The Court further notes that the Permit issued to local entities, who are Petitioners here, does not refer to any inspection obligations related to state-issued permits. [Citation.] There is no duplication of efforts and no shifting of inspection responsibility in derogation of the Regional Board’s responsibility here. The Regional Board is not giving up its won responsibilities, and there is nothing arbitrary or capricious about the Permit’s inspection provisions.” (*Id.* at 17-18.)

It is also important to note that similar controls for industrial/commercial facilities and construction sites, including inspection activities, required by this Order were also required in the 2002 San Bernardino County MS4 permit issued by the Santa Ana Regional Water Quality Control Board (Santa Ana Regional Water Board). Like Order No. 01-182, that permit was also subject to litigation. In that case, the City of Rancho Cucamonga claimed that the Santa Ana Regional Water Board improperly delegated to it and other permittees the inspection duties of the State and Regional Water Boards and that it was being required to conduct inspections for facilities covered by other state-issued general NPDES permits.

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(*City of Rancho Cucamonga v. Regional Water Quality Control Board- Santa Ana Region* (2006) 135 Cal.App.4th 1377, 1389.)_Like the Los Angeles County Superior Court, the California Court of Appeal rejected this argument. The Court of Appeal upheld the Santa Ana Regional Water Board’s requirements, finding that “Rancho Cucamonga and the other permittees are responsible for inspecting construction and industrial sites and commercial facilities within their jurisdiction for compliance with and enforcement of local municipal ordinances and permits. But the Regional Board continues to be responsible under the 2002 NPDES permit for inspections under the general permits. The Regional Board may conduct its own inspections but permittees must still enforce their own laws at these sites. (40 C.F.R. § 122.26, subd. (d)(2) (2005).)” (*Id.* at 1390.)

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b. Background

Municipalities are required to control the storm water discharges associated with industrial activities and other commercial facilities identified as significant contributors of pollutants through the implementation of a mandatory baseline minimum set of source control BMPs; performance of an inspection program to verify the adequacy of BMPs implementation in the field and compliance with the municipal ordinances; and assist the Regional Water Board in ensuring that industrial activities subject to regulations are covered by the general industrial stormwater permit. Regional Water Board will also assist the municipalities in case of instances of egregious non-compliance with the municipal ordinances and state and federal laws and regulations.

The municipality is ultimately responsible for discharges from the MS4. Because industrial awareness of the program may not be complete, there may be facilities within the MS4 area that should be permitted under an industrial storm water permit but are not (non-filers). In addition, the Phase I regulations that require industries to obtain permit coverage for storm water discharges is largely based on Standard Industry Classification (SIC) Code. This has been shown to be incomplete in identifying industries that may be significant sources of storm water pollution (“industries” includes commercial businesses). The word "industries" is used in a broad sense. Another concern is that the permitting authority may not have adequate resources to provide the necessary oversight of permitted facilities. Therefore, it is in the municipality’s best interest to assess the specific situation and implement an industrial/commercial inspection/site visit and enforcement program to control the contribution of pollutants to the MS4 from all high risk sources.

In the preamble to the 1990 regulations, USEPA clearly states the intended strategy for discharges of storm water associated with industrial activity:

"...Municipal operators of large and medium municipal separate storm sewer systems are responsible for obtaining system-wide or area permits for their system's discharges. These permits are expected to require that controls be placed on storm water discharges associated with industrial activity which discharge through the municipal system." The USEPA also notes in the preamble

that "... municipalities will be required to meet the terms of their permits related to industrial dischargers."

Similarly, in the USEPA's Guidance Manual (Chapter 3.0), USEPA specified that MS4 applicants must demonstrate that they possess adequate legal authority to:

- i. Control construction site and other industrial discharges to MS4s;
- ii. Prohibit illicit discharges and control spills and dumping;
- iii. Carry out inspection, surveillance, and monitoring procedures.

The document goes on to explain that "control," in this context means not only to require disclosure of information, but also to limit, discourage, or terminate a storm water discharge to the MS4. Further, to satisfy its permit conditions, a municipality may need to impose additional requirements on discharges from permitted industrial facilities, as well as discharges from industrial facilities and construction sites not required to obtain permits.

In the same Guidance Manual (Chapter 6.3.3), USEPA states that the municipality is ultimately responsible for discharges from their MS4. Consequently, the MS4 applicant must describe how the municipality will help the USEPA and authorized NPDES States to:

- i. Identify priority industries discharging to their systems;
- ii. Review and evaluate storm water pollution prevention plans (SWPPPs) and other procedures that industrial facilities must develop under general or individual permits;
- iii. Establish and implement BMPs to reduce pollutants from these industrial facilities (or require industry to implement them); and
- iv. Inspect and monitor industrial facilities discharging storm water to the municipal systems to ensure these facilities are in compliance with their NPDES storm water permit, if required.

c. Industrial/Commercial Business Program Implementation

The requirements in this Order clarify the scope and frequency of inspections. For commercial facilities, in general, frequencies have been modified to require inspections of a facility twice during the five year permit term provided that the first mandatory compliance inspection takes place no later than two years after the date this Order is adopted with a minimum interval of six months between the first and second inspection. The scope of the inspections for each of the facility types was clarified by specifying in tables what BMPs should be implemented at that facility to ensure that pollutant generating activity does not occur. The tables include a range of BMPs that are anticipated to be needed at select industrial and commercial facilities. The BMP categories are based on BMPs identified in the 2003 California Stormwater BMP Handbook, Industrial and Commercial as well as BMPs identified in Regional Water Board Resolution No. 98-08.

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For industrial facilities, an initial mandatory compliance inspection must be completed at all industrial facilities no later than 2 years after the date this Order is adopted. If after the initial inspection, the facility was determined to as having exposure of industrial activities to storm water then the permit requires a second mandatory compliance inspection with a minimum interval of 6 months between the first and second mandatory compliance inspection. For facilities determined not to have exposure of industrial activities to storm water during the initial inspection, Permittees must conduct second compliance inspections yearly at a minimum of 20% of the facilities.

A provision was added to the Order relieving Permittees of the responsibility to inspect industrial facilities that the Regional Water Board has inspected within the previous 24 months.

In regards to the level of inspection, this Order clarifies that the Permittees are expected to check during inspections for a current Waste Discharge Identification (WDID) number for facilities discharging storm water associated with industrial activity, and that a SWPPP is available on site or that the owner/operator of the facility has applied for and has a current No Exposure Certification (and WDID number). In addition Permittees are expected to check during inspections for compliance with the implementation of minimum BMPs, as previously approved by Board Order 98-08, and compliance with the local storm water ordinances.

The inspection requirements in this Order provide greater clarification concerning the scope of enforcement. A progressive enforcement procedure was outlined including minimum steps that Permittees must take in their program to enforce their municipalities' storm water requirements. In recognition of some of the Permittees concerns regarding the resource intensive efforts needed to elevate enforcement actions, a mechanism was provided through which Permittees can refer cases to the Regional Water Board, and for violations of the State Water Board's General Industrial Activities Storm Water NPDES permit, the referral can be expedited, referral can occur after a single inspection and one written notice rather than referral after two inspections and two written notices.

6. Planning and Land Development Program

a. Legal Authority

The permit application requirements described in 40 CFR section 122.26(d) have formed the basis for MS4 permits and remain applicable as elements in a storm water program. 40 CFR section 122.26(d)(2)(iv), requires in part, that the large and medium MS4 system applicant develop a management plan. Specifically, with regards to planning and land development and post-construction controls, the management plan shall include the following:

“(A) A description of structural and source control measures to reduce pollutants from runoff from commercial and residential areas that are discharged from the municipal storm sewer system that are to be implemented during the life of the

permit, accompanied with an estimate of the expected reduction of pollutant loads and a proposed schedule for implementing such controls. At a minimum, the description shall include:

(1) A description of maintenance activities and a maintenance schedule for structural controls to reduce pollutants (including floatables) in discharges from municipal separate storm sewers;

(2) A description of planning procedures including a comprehensive master plan to develop, implement and enforce controls to reduce the discharge of pollutants from municipal separate storm sewers which receive discharges from areas of new development and significant redevelopment. Such plan shall address controls to reduce pollutants in discharges from municipal separate storm sewers after construction is completed.

(3) A description of practices for operating and maintaining public streets, roads and highways and procedures for reducing the impact on receiving waters of discharges from municipal storm sewer systems

(4) A description of procedures to assure that flood management projects assess the impacts on the water quality of receiving water bodies and that existing structural flood control devices have been evaluated to determine if retrofitting the device to provide additional pollutant removal from storm water is feasible.”

b. Background

Land development and urbanization have been linked to the impairment of aquatic life beneficial uses in numerous studies. Poorly planned new developments and re-development have the potential to impact the hydrology of the watershed and the water quality of the surface waters. Development without proper controls, often result in increased soil compaction, changes in vegetation and increased impervious surfaces. These conditions may lead to a reduction in groundwater recharge and changes in the flow regime of the surface water drainages. Historically, urban development has resulted in increased peak stream flows and flow duration, reduced base flows, and increased water temperatures. Pollutant loading in storm water runoff often increases due to post-construction use and because the storm water runoff is directly connected to the storm drain system or to the surface water body, without the benefit of filtration through soil and vegetation.

In a natural water body (i.e., a water body that has not been armored for flood control or channel stability), increased peak flows and flow duration can cause stream bank erosion, changes in channel geomorphology and bed sediment composition and stability.

When development infringes upon natural riparian buffers, the additional impacts may include further stream bank instability, increased nitrogen loadings to the water body—which would have been intercepted by native riparian vegetation,

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loss of shading resulting in further increase in water temperature, and a loss of woody debris and leaf litter, which provide food and habitat for some aquatic species.

Low Impact Development (LID) strategies are designed to retain storm water runoff on-site by minimizing soil compaction and impervious surfaces, and by disconnecting storm water runoff from conveyances to the storm drain system. This Order establishes criteria for the volume of storm water to be retained on-site as required to meet water quality goals and to preserve pre-development hydrology in natural drainage systems.

In California, hydromodification studies have focused on the erosive effects of storm water runoff flows and the resulting changes in geomorphology and bed sediment. As described in Hawley et al., southern California streams may be especially susceptible to geomorphic changes due to steep topography, flashy flow regimes, high sediment loads and largely non-resistant stream bed material. This recent study assessed the impact of urbanization on peak flow and the duration of lower flows capable of moving bed sediment. The results of the study showed that, urbanization resulted in proportionally-longer durations of all geomorphically-effective flows, with a more pronounced effect on the durations of low to moderate flows.

A study performed by United States Geological Survey (USGS) researchers at nine different metropolitan areas within the United States, found that adverse impacts to macroinvertebrate benthic communities were observed in drainages with 5 percent impervious area. The authors concluded that there appears to be no percent impervious area threshold below which benthic communities are not adversely impacted

The Grand River (lower) Surrogate Flow Regime Total Maximum Daily Load (TMDL), prepared for the Ohio Environmental Protection Agency (OEPA), examined the impacts of impervious cover and flow regime changes on aquatic life beneficial uses. The TMDL was approved by USEPA on April 12, 2012. The TMDL analysis showed that aquatic community health (as measured by biological indices) decreased as impervious cover increased. Flow alteration and impervious cover were determined to be the stressors impairing aquatic life. Riparian buffers were identified as a mitigating factor. Peak flow, runoff volume, and flashiness were considered as surrogates. However, for this watershed, flow regime was selected because it addresses the full spectrum of flow conditions (i.e., peak flow and flow duration and base flow). In this watershed, low flow and increased water temperature presented a threat to cold-water fish species. Increased peak flow and flow duration were linked to impairment of aquatic life beneficial uses due to increased pollutant loading and the impact of channel scouring. A flow duration curve was developed for a reference watershed, based on unit area to allow for comparison of varying-sized streams. The criteria for selecting the reference watershed were: (1) the water body was fully supporting aquatic life beneficial uses, (2) location (ecoregion), (3) size (4) land cover (5) riparian buffer and (6) soils. The flow regime TMDL compares flow duration

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curves for the impaired stream and the reference stream. The TMDL is expressed as the difference between the impaired stream's flow and the reference stream's flow during all flow conditions. The TMDL report recommends protection strategy numeric targets of no more than 6 percent EIA with a forested (70 percent coverage) riparian buffer of 100 feet from the top of each stream bank (200 feet total).

In Los Angeles County, development has infringed upon or eliminated natural riparian buffers and existing development exceeds recommended percent impervious area in many watersheds. In addition, many water bodies have been armored or converted to engineered channels to manage flood hazards. Because of the hydrologic differences between engineered channels and natural water bodies, the Regional Water Board approaches each situation differently. Where development occurs in drainages to water bodies that have been converted to engineered channels, the Regional Water Board's regulatory approach is designed to reduce storm water runoff -- the most effective method for reducing pollutant loading. Alternatively, where development occurs in drainages to natural water bodies, the Regional Water Board regulatory approach aims to reduce pollutant loading conveyed by storm water runoff and to preserve or restore the pre-development hydrology. As a result of past development, it is likely that retrofitting of existing development will be necessary to restore watershed hydrology to pre-development conditions.

c. Applicability

New development and re-development projects subject to these requirements are described in Part VI.D.6.b. of this Order. Although not defined for large and medium MS4s, 40 CFR section 122.34 requires programs for small MS4s to include all projects that disturb an area equal to or greater than 1 acre of land and add more than 10,000 square feet of impervious surface area. The list of new development projects subject to requirements, specified in this Order in Parts VI.D.1.c.i(1)(a) through (k) were either carried over from Order No. 01-182 or were developed for the Ventura County MS4 and are appropriate for defining new developments and redevelopments in this Order. Clarification is provided for developments in progress during formulation of this Order (Part VI.D.c.i(1)(4)).

New development/re-development projects are subject to either the Water Quality/Flow Reduction Resource Management Criteria in Part VI.D.6.c.i or potentially more stringent Hydromodification (Flow/ Volume/ Duration) Control Criteria. Note that hydromodification controls apply only to projects that drain to a natural water body that is a stream, creek or a river. Hydromodification controls do not apply to discharges to lakes, estuaries, or to the ocean, which are not susceptible to channel erosion.

i. Integrated Water Quality/ Flow Reduction /Resources Management Criteria (Part VI.D.6.c.i). Projects located in drainages to water bodies that are now engineered channels are subject to Integrated Water Quality/Flow Reduction/Resources Management Criteria. These projects must be designed

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to minimize the footprint of the impervious area and to use low impact development (LID) strategies to disconnect the runoff from impervious area. The project must be designed to retain on-site the storm water runoff equal to the storm water quality design volume (SWQDv), unless it is determined that it is technically infeasible or there is an opportunity to contribute to an off-site regional ground water replenishment project.

The SWQDv is defined as the storm water runoff resulting from either:

- the 0.75 inch per 24 hour storm or
- the 85th percentile storm as defined in the Los Angeles County 85th percentile, 24-hour storm isohyetal map, whichever is greater.

This Order establishes a minimum design volume based on the 0.75 inch, 24-hour storm event as defined in the previous Los Angeles County MS4 permit (Order No. 01-182). This requirement is to prevent backsliding from the previous Order. The 85th percentile storm is the design storm used throughout most of the State of California for storm water treatment and LID BMPs designed for water quality protection.

Using detailed local rainfall data, the County of Los Angeles Hydrologist has developed the 85th percentile storm event isohyetal map, which exhibits the size of the 85th percentile storm event throughout Los Angeles County. Since this map uses detailed local rainfall data, it is more accurate for calculating the 85th percentile storm event than other methods which were included in Order No. 01-182. The other methods found in Order No. 01-182 were included as options to be used in the event that detailed accurate rainfall data did not exist for various locations within Los Angeles County. Therefore, they have not been carried over into this Order.

Storm water runoff may be retained on-site by methods designed to intercept rain water via infiltration, bioretention, and harvest and use. Examples of LID Best Management Practices (BMPs) that may be employed to meet the storm water retention requirements include rain gardens, bioswales, pervious pavement, green roofs, and rainwater harvesting for use in landscape irrigation.

ii. Alternative Compliance for Technical Infeasibility or Opportunity for Regional Ground Water Replenishment (Part VI.D.6.c.ii). This Order defines conditions that may make on-site retention of the SWQDv technically infeasible. These conditions include measures to:

- Ensure that on-site soils (*in-situ* or amended) have adequate infiltration rates for successful operation of infiltration BMPs,
- Protect groundwater and drinking water wells from contamination,
- Prevent infiltration that might exacerbate potential geotechnical hazards,
- Accommodate smart growth and infill or redevelopment.

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A determination that compliance with the Integrated Water Quality/Flow Reduction/Resources Management Criteria is technically infeasible at the New Development/Re-development project site must be based on a site-specific hydrologic assessment or design analysis conducted and endorsed by a registered professional engineer, geologist, architect or landscape architect. This requirement is the same as contained in the Ventura County MS4 permit, and is necessary to ensure that a competent determination is conducted.

The criteria for technical infeasibility contained in Part VI.D.6.c.ii(2)(a) is necessary to ensure that the *in-situ* soil has adequate permeability to accommodate infiltration, and to ensure against premature failure of infiltration BMPs. A minimum infiltration rate of 0.15–3 inches per hour under saturated conditions is specified for infiltration BMPs (e.g., dry well, pervious pavement). Infiltration BMPs are restricted to Hydrologic Soil Groups A and B, by other California storm water regulatory agencies. For example, the Contra Costa County Program’s Stormwater LID Design Guidebook prohibits routing storm water runoff to a dry (infiltration) well, developed in Hydrologic Soil Groups C and D³². Infiltration rates for the lower permeability B soil group ranges between 0.30 and 0.15 inches per hour (USEPA, 2009, Appendix A)³³. This criterion is specified to ensure the viability of infiltration systems, which may be depended upon to meet the storm water design volume criteria.

Infiltration BMPs are distinguished from bioretention BMPs, which may be implemented in all soils types. Bioretention BMPs are constructed using a manufactured/imported media that must meet strict specifications. The media specification for bioretention facilities is the same as specified for biofiltration systems. The difference between bioretention and biofiltration is that biofiltration systems are designed with an underdrain, which may allow for the discharge of a significant portion of the design storm volume, as described below under Alternative Compliance Measures. Bioretention BMPs may not include an underdrain.

The criteria for determining Technical Infeasibility described in Part VI.D.6.c.ii.(2)(b)-(f) are the same as contained in the Ventura County MS4 permit , except that (2)(b) “locations where seasonal high ground water is *within 5 feet of the surface*”, was expanded to “5 to 10 feet” of the surface, to be consistent with local LID Manuals developed by the City of Santa Monica and the City of Los Angeles.

³² Contra Costa County Clean Water Program. 2010. Stormwater C.3 Guidebook, Stormwater Quality Requirements for Development Applications. Fifth Ed. October 20, 2010. p. 18. < www.cccleanwater.org >.

³³ USEPA. 2009. (United States Environmental Protection Agency). Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy and Independence and Security Act. Office of Water. December 2009.

iii. Alternative Compliance Measures (Part VI.D.6.c.iii.). This Order provides equally weighted alternatives to on-site retention of the SWQDv. One alternative is to employ infiltration at off-site locations, including regional groundwater replenishment projects. In an effort to promote retrofitting of existing development, alternative compliance measures may include the use of infiltration, bioretention, rainfall harvest and/or biofiltration at an existing development with similar land uses and where storm water runoff is expected to exhibit pollutant event mean concentrations (EMCs) that are comparable to or higher than the proposed new development re-development project. As another alternative the project proponent may comply with the Integrated Water Quality/Flow Reduction/Resources Management Criteria using biofiltration on the project site. The volume of storm water to be treated with biofiltration is 1.5 times the difference between the SWQDv and the volume of storm water runoff that can be reliably retained on the project site. The 1.5 multiplier is based on the finding in the *Ventura County Technical Guidance Manual* that biofiltration of 1.5 times the design volume will provide approximately the same pollutant removal as retention of the design volume on an annual basis.³⁴

The volume of storm water runoff to be intercepted at an off-site mitigation project is equal to the difference between the SWQDv and the volume of storm water runoff that can be *reliably retained* on the project site. The estimate of the volume that can be reliably retained on-site shall be based on conservative assumptions including permeability of soils under saturated conditions. When rainfall harvest and use is linked to irrigation demand, the demand shall be estimated based on conditions that exist during the wet weather, winter season.

Mitigation at off-site projects shall be designed to provide equal or greater water quality protection to the surface waters within the same subwatershed as the proposed project. Preferably, the mitigation site will be located within the same Hydrologic Unit Code (HUC)-12 drainage area as the proposed new development or re-development. However, the mitigation project may be located within the expanded HUC-10 drainage area, if approved by the Executive Officer of the Regional Water Board.

As described in the *Ventura County Technical Guidance Manual*, a biofiltration system as defined in this Order, including Attachment EH, allows for incidental interception of approximately 40 percent of the treatment volume and treatment of the remaining volume through filtration, and aerobic and anaerobic degradation. The effectiveness of the biofiltration system is greatly impacted by the volume of storm water runoff that is intercepted through incidental infiltration. For this reason, biofiltration as defined in this Order, does not include flow-through planter

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³⁴ Ventura Countywide Stormwater Management Program. 2011. Ventura Technical Guidance Manual, Manual Update, 2011. Appendix D. July 13, 2011.

box or vault type systems with impervious bottom layers, unless Executive Officer approval is obtained. In addition, biofiltration systems as defined in this Order, must meet the specifications for drain placement and planting media provided in Attachment L if they are to be credited as meeting the water quality/flow reduction requirements of the Alternative Compliance Measures of this Order, unless Executive Officer approval is obtained. Attachment L-H provides a compilation of recent information contained in the Contra Costa County C3 Guidebook and Order R2-2011-083, adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on November 28, 2011. These specifications are based on experiences in the San Francisco Bay Region and are designed to ensure optimum pollutant removal and to prevent premature failure of infiltration components of the biofiltration system.

- iv. Water Quality Mitigation Criteria (Part VI.D.6.c.iv.)** When off-site mitigation is performed, the storm water runoff from the project site must be treated prior to discharge. Volume-based treatment BMPs are to be sized to treat the runoff from the 85th percentile, 24-hour storm event, as described above for storm water retention BMPs. Flow through treatment BMPs are to be sized based on a rainfall intensity of 0.2 inches per hour or the one year, one-hour rainfall intensity as determined from the Los Angeles County isohyetal map, whichever is greater. A minimum flow design of 0.2 inches per hour is consistent with Order No. 01-182 and is included to prevent back sliding. The one year, one-hour rainfall intensity is the flow requirement specified in the Los Angeles River Trash Total Maximum Daily Loads (TMDL) and other Trash TMDLs established in the Region. The Los Angeles County isohyetal map of the one-year, one-hour storm intensity provides an accurate measure of variable storm intensity throughout the County. The one-year, one-hour rain intensity within the County ranges from approximately 0.2 inch/hour to 1.1 inches per hour.
- v. Hydromodification (Flow/ Volume/ Duration Control Criteria (Part VI.D.6.v.)).** New development/re-development projects located in a drainage to a natural stream/creek/river water body shall be required to meet the water quality/flow reduction criteria and/or hydromodification control criteria, whichever are more stringent. (Hydromodification controls do not apply to discharges to lakes, estuaries or to the Pacific Ocean as these types of water bodies are not susceptible to hydromodification impacts.) This Order provides ~~Interim~~ Hydromodification Control Criteria to be employed ~~until the State Water Board or Regional Water Board adopts a final Hydromodification Policy~~. The purpose of the hydromodification controls is to preserve or restore pre-development hydrology.

Part VI.D.6.v.(b) of this Order describes New Development/Re-development projects that are exempted from hydromodification controls. These projects include maintenance and replacement activities and other

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projects that do not increase EIA within the subwatershed and therefore are not expected to add to the hydromodification effects. Also exempted are projects located within drainages to waterbodies that are not susceptible to channel erosion or other hydromodification effects.

~~This Order anticipates the issuance of a State-wide Hydromodification criteria or guidance within the term of this Order, but provides interim criteria for New Development/Re-development projects that are permitted pending the issuance of State-wide Guidance. This Order also identifies preliminary tasks to be conducted within 24 months after the effective date of this Order. The results of these preliminary tasks will support the development of a final Subwatershed Hydromodification Plan. The final Subwatershed Hydromodification Plan must be completed within 12 months after the issuance of the State-wide Guidance, unless the compliance period is extended by the Executive Officer of the Regional Water Board.~~

This Order offers ~~three~~ four options for meeting the interim hydromodification controls for projects that will disturb greater than 1 acre but less than 50 acres:

- The project is designed to retain the storm water runoff from the 95th percentile, 24-hour-hour storm. This criterion is based on the recommendations from the USEPA's *Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act* (USEPA, 2009).
- The runoff flow rate, volume, velocity and duration does not exceed the pre-development condition for the 2-year, 24-hour rainfall event. Research has determined that the maximum point of the effective work curve occurs in the 1 to 2-year frequency (Leopold, 1964, as cited in the South Orange County Hydromodification Plan, 2011)³⁵. Furthermore, the effects of development are greatest during smaller storm events. Under natural conditions, the storm water runoff from smaller storms would have been largely intercepted by vegetation, canopy, infiltration and/or evapotranspiration. During large storms, the soils become saturated and runoff occurs even under natural conditions.
- The Erosion Potential (Ep) in the receiving water channel will approximate 1, as determined by the Hydromodification Analysis Study and the Equation presented in Attachment J. This provision is the same as the requirement in the Ventura County MS4 permit (Order No. R4-2010-0108). By maintaining an Ep of approximately 1, the bed sediment of the channel is in an equilibrium state. Alternatively,

³⁵ South Orange County. 2011. South Orange County Hydromodification Management Plan. < http://www.waterboards.ca.gov/sandiego/water_issues/programs/stormwater/docs/oc_permit/updates_031212/South_Orange_County%20HMP.pdf > Accessed April 25, 2012.

Permittees can opt to use other work equations to calculate Erosion Potential with Executive Officer approval.

- Permittees may also satisfy the requirement for Hydromodification Controls by implementing the hydromodification requirements in the County of Los Angeles Low Impact Development Manual (2009) for all projects disturbing an area greater than 1 acre within natural drainage systems.

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For projects disturbing more than 50 acres, compliance with the ~~interim~~ controls may be achieved by similar means. However, the plans must be supported by more comprehensive hydrologic modeling. The final Subwatershed Hydromodification Plan must be completed within one year after the effective date of the Order.

The elements of the ~~Interim~~-Subwatershed Hydromodification Plan are:

- Screening to assess which subwatersheds exhibit changes in geomorphology.
- Identify natural drainage systems within the subwatershed that are susceptible to hydromodification impacts,
- Identify areas critical to the hydrology (e.g., groundwater recharge areas, riparian buffers and wetlands) of the subwatershed and identify potential protection strategies for such areas,
- Conduct or access bioassessment monitoring data to assess whether aquatic life uses are being fully supported,
- Prepare preliminary protection strategies for subwatersheds that are fully supporting aquatic life beneficial uses,
- Prepare preliminary retrofit strategies for subwatersheds that exhibit the effects of hydromodification and are not fully supporting aquatic life beneficial uses,
- Identify candidate reference sub-watersheds that are supporting aquatic life beneficial uses and develop a flow duration curve that may serve as a standard for flow duration controls in water bodies that have aquatic life impairments linked to changes in the flow regime. This approach is as described in the recently approved OEPA, Grand River (lower) Flow Regime TMDL.

7. Development and Construction Program

a. Introduction

Soil disturbing activities during construction and demolition exacerbate sediment losses. Sediment is a primary pollutant impacting beneficial uses of watercourses. Sediments, and other construction activity pollutants must be properly controlled to reduce or eliminate adverse impacts.

b. Legal Authority

40 CFR section 122.34(b)(4) states that with respect to construction site storm water runoff control for small MS4s, which is analogous to that for large MS4s:

“(i) [the permittee] must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. If the NPDES permitting authority waives requirements for storm water discharges associated with small construction activity in accordance with § 122.26(b)(15)(i), you are not required to develop, implement, and/or enforce a program to reduce pollutant discharges from such sites. (ii) Your program must include the development and implementation of, at a minimum: (A) An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State, Tribal, or local law; (B) Requirements for construction site operators to implement appropriate erosion and sediment control best management practices; (C) Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality; (D) Procedures for site plan review which incorporate consideration of potential water quality impacts; (E) Procedures for receipt and consideration of information submitted by the public, and (F) Procedures for site inspection and enforcement of control measures.”

The inspection requirements for construction sites contained in this Order are also based on the requirements found in Order No. 01-182. As noted above in Part VI.C.5.a, the inspection requirements contained in Order No. 01-182 for construction sites were the subject of litigation between several permittees and the Regional Water Board. As provided in more detail above, the Los Angeles County Superior Court upheld the inspection requirements for industrial/commercial facilities and construction sites in Order No. 01-182, finding that the “[t]he Permit contains reasonable inspection requirements for these types of facilities.” (*In re L.A. Cnty. Mun. Storm Water Permit Litig.*, No. BS 080548 (L.A. Super. Ct., No. BS 080548, Mar. 24, 2005), Statement of Decision from Phase II Trial on Petitions for Writ of Mandate, p. at-17.) As also noted above, the Superior Court also rejected the permittees’ claims that the requirements in Order No. 01-182 shifted the Regional Water Board’s inspection responsibility under State Water Board issued general NPDES permits for these types of facilities onto the local agencies, finding that “[r]equiring permittees to

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inspect commercial and industrial facilities and construction sites is authorized under the Clean Water Act, and both the Regional Board and the municipal permittees or the local government entities have concurrent roles in enforcing the industrial, construction and municipal permits. The Court finds that the Regional Board did not shift its inspection responsibilities to Petitioners.” (*Id.* at 17-18.)

As previously noted for inspections of commercial/industrial facilities, the California Court of Appeal also rejected arguments pertaining to similar inspection requirements for construction sites prescribed by the Santa Ana Regional Water Board. (*City of Rancho Cucamonga v. Regional Water Quality Control Board- Santa Ana Region* (2006) 135 Cal.App.4th 1377, 1389.) In that case, the City of Rancho Cucamonga claimed that the Santa Ana Regional Water Board improperly delegated to it and other permittees the inspection duties of the State and Regional Water Boards and that it was being required to conduct inspections for facilities covered by other state-issued general NPDES permits. The Court of Appeal upheld the Santa Ana Regional Water Board’s requirements, finding that “Rancho Cucamonga and the other permittees are responsible for inspecting construction and industrial sites and commercial facilities within their jurisdiction for compliance with and enforcement of local municipal ordinances and permits. But the Regional Board continues to be responsible under the 2002 NPDES permit for inspections under the general permits. The Regional Board may conduct its own inspections but permittees must still enforce their own laws at these sites. (40 C.F.R. § 122.26, subd. (d)(2) (2005).)” (*Id.* at 1390.)

c. Construction Activity Applicability

Any construction or demolition activity, including, but not limited to, clearing, grading, grubbing, or excavation, or any other activity that results in a land disturbance of equal to or greater than one acre.

Construction activity that results in land surface disturbances of less than one acre if the construction activity is part of a larger common plan of development or sale of one or more acres of disturbed land surface.

Construction activity related to residential, commercial, or industrial development on lands currently used for agriculture including, but not limited to, the construction of buildings related to agriculture that are considered industrial pursuant to USEPA regulations, such as dairy barns or food processing facilities.

Construction activity associated with linear underground/overhead project (LUPs) including, but not limited to, those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities) and include, but are not limited to, underground utility mark-out, potholing, concrete and asphalt

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cutting and removal, trenching, excavation, boring and drilling, access road and pole/tower pad and cable/wire pull station, substation construction, substructure installation, construction of tower footings and/or foundations, pole and tower installations, pipeline installations, welding, concrete and/or pavement repair or replacement, and stockpile/borrow locations.

Discharges of sediment from construction activities associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities.

Storm water discharges from dredge spoil placement that occur outside of U.S. Army Corps of Engineers jurisdiction³⁶ (upland sites) and that disturb one or more acres of land surface from construction activity are covered by this General Permit. Construction projects that intend to disturb one or more acres of land within the jurisdictional boundaries of a CWA section 404 permit should contact the appropriate Regional Water Board to determine whether this permit applies to the project.

d. Development Construction Program Implementation

Permittees must implement a construction program that applies to all activities involving soil disturbance with the exception of agricultural activities. Minimum requirements have been established for construction activity less than one acre and for those activities equal or greater than one acre. Activities covered by the permit include but are not limited to grading, vegetation clearing, soil compaction, paving, re-paving, and LUPs. The construction program should be designed to: (1) prevent illicit construction-related discharges of pollutants into the MS4 and receiving waters; (2) implement and maintain structural and non-structural BMPs to reduce pollutants in storm water runoff from construction sites; (3) reduce construction site discharges of pollutants to the MS4 to the MEP; and (4) prevent construction site discharges to the MS4 from causing or contributing to a violation of water quality standards.

Each permittee shall use an site system to track grading permits, encroachment permits, demolition permits, building permits, or construction permits (and any other municipal authorization to move soil and/ or construct or destruct that involves land disturbance) issued by each permittee. To satisfy this requirement, the use of a database or GIS system is recommended.

For construction activity equal or greater than one acre, the Permittee must establish review procedures for construction site plans to determine potential water quality impacts and ensure the proposed controls are adequate. These procedures should include the preparation and submission of an Erosion and Sediment Control Plan (ESCP) containing elements of a Storm Water Pollution Prevention Plan (SWPPP) prior to issuance of a grading or building permit as

³⁶ A construction site that includes a dredge and/or fill discharge to any water of the United States (e.g., wetland, channel, pond, or marine water) requires a permit from the U.S. Army Corps of Engineers pursuant to CWA section 404 and a Water Quality Certification from the Regional Water Board or State Water Board pursuant to CWA section 401.

well as a review of individual pre-construction site plans to ensure consistency with local sediment and erosion control requirements. The requirement that ESCP/SWPPPs must be developed by a Qualified SWPPP Developer (QSD) is new for this iteration of the permit. This requirement ensures the development of high quality ESCP/SWPPPs that protect water quality to the MEP.

A ESCP/SWPPP must be appropriate for the type and complexity of a project and will be developed and implemented to address project specific conditions. Some projects may have similarities or complexities, yet each project is unique in its progressive state that requires specific description and selection of BMPs needed to address all possible generated pollutants. The Permittee must ensure that construction site operators select and implement appropriate erosion and sediment control measures to reduce or eliminate the impacts to receiving waters. To help guide their Construction Program and ensure consistency regarding BMP selection, the Permit requires the Permittee to develop or adopt BMP standards for a range of construction related activities. The list of activities is based on California Stormwater Quality Association's (CASQA) Construction BMP handbook. The ESCP/SWPPP must include the rationale used for selecting or rejecting BMPs. The project architect, or engineer of record, or authorized qualified designee, must sign a statement on the ESCP/SWPPP to the effect:

"As the architect/ engineer of record, I have selected, appropriate BMPs to effectively minimize the negative impact of the project's construction activities on storm water quality. The project owner and contractor are aware that the selected BMPs must be installed, monitored, and maintained to ensure their effectiveness. The BMPs not selected for implementation are redundant or deemed not applicable to the proposed construction activity."

The Permittee is responsible for conducting inspection and enforcement of erosion and sediment control measures at specified times and frequencies during construction including prior to land disturbance, during grading and land development, during streets and utilities activities, during vertical construction, and during final landscaping and site stabilization. The Permittees' Municipal Inspectors must be adequately trained and Permittees are encouraged to offer opportunities for inspectors to enroll in the State Water Board sponsored Qualified Storm Water Pollution Prevention Plan (SWPPP) Practitioner (QSP) certification program. A progressive enforcement policy has been integrated into this iteration of the permit to ensure that adequate penalties are in place and to ensure the protection of receiving water quality.

Prior to approving and/ or signing off for occupancy and issuing the Certificate of Occupancy for all construction projects subject to post-construction controls, each permittee shall inspect the constructed site design, source control and treatment control BMPs to verify that they have been constructed in compliance with all specifications, plans, permits, ordinances, and this Order. The initial/ acceptance BMP verification inspection does not constitute a maintenance and operation inspection.

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The Permittee must ensure that staff has proper training. In addition, the Permittee must develop and distribute training and educational material and conduct outreach to the development community. To ensure that the construction program is followed, construction operators must be educated about site requirements for control measures, local storm water requirements, enforcement activities, and penalties for non-compliance.

8. Public Agency Activities Program

a. Background

Publically-owned or operated facilities serve as hubs of activity for a variety of municipal staff from many different departments. Some municipalities will have one property at which all activities take place (e.g., the municipal maintenance yard), whereas others will have several specialized facilities such as animal control facilities, chemical storage facilities, composting facilities, equipment storage and maintenance facilities, fueling facilities, hazardous waste disposal facilities, incinerators, landfills, materials storage yards, pesticide storage facilities, public buildings, public parking lots, public golf courses, public swimming pools, public parks, public marinas, recycling facilities, solid waste handling and transfer facilities, and flood control facilities.

b. Program Implementation

i. Public Construction Activities Management

The Permittee is required to implement BMPs and comply with the Planning and Land Development Program requirements in Part VI.D.6 of this Order and the Development Construction Program requirements in Part VI.D.7 of this Order at applicable Permittee-owned or operated (i.e., public or Permittee sponsored) construction projects. These requirements ensure that Permittee-owned or operated construction and development occurs in an equally protective manner as private development. The Permittee is also required to implement an effective combination of erosion and sediment control BMPs from Table 13 (see Construction Development Program, minimum BMPs) at those public sites that disturb less than one acre of soil. Last, the Permittee is required to obtain separate coverage under the State Water Board's Construction General NPDES Permit for all Permittee-owned or operated construction sites that require coverage.

ii. Public Facility Inventory

A comprehensive list of publically-owned or operated facilities will help staff responsible for storm water compliance build a better awareness of their locations within the MS4 service area and their potential to contribute storm water pollutants. The inventory should include information on the location, contact person at the facility, activities performed at the facility, and whether the facility is covered under an industrial general storm water permit or other individual or general NPDES permit, or any applicable waivers issued by the

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Regional or State Water Board pertaining to storm water discharges. Incorporation of GIS into the inventory is encouraged. The facility inventory should be updated at least twice during the permit term and will serve as a basis for setting up periodic facility assessments and developing, where necessary, facility storm water pollution prevention plans. By developing an inventory of Permittee-owned facilities that are potential sources of storm water pollution helps to ensure that these facilities are monitored and receiving water quality is protected.

iii. Inventory of Existing Development for Retrofitting Opportunities

Each Permittee is required to maintain an updated inventory of all Permittee-owned or operated (i.e., public) facilities within its jurisdiction that are potential sources of storm water pollution. This requirement is similar to the requirement of Order No. 01-182. In this Order, the incorporation of facility information into a GIS is recommended as this has been proven effective for effectively inventory and management of facilities and associated BMPs. Given that facility operation, condition, and practices can change over a five year period, the Permittees are required to update its inventory at least twice during the term of this Order.

In addition to developing an inventory of publically-owned or operated facilities, in this Order, Permittees are required to develop an inventory of existing development for retrofitting opportunities. The intention of adding this requirement to the permit is to encourage the use of retrofit projects that reduce storm water pollutants into the MS4 that are a result of impacts from existing development. Permittees are also required to evaluate and rank these retrofitting opportunities.

iv. Public Agency Facility and Activity Management

Each Permittee is required to manage its facilities in accordance with the State Water Board’s Industrial General NPDES Permit, where applicable, and shall ensure the implementation and maintenance of appropriate BMPs at all facilities with a potential to pollute stormwater. Therefore, Permittees shall obtain separate coverage under the State Water Board’s Industrial General NPDES Permit for all Permittee-owned or operated facilities where industrial activities are conducted that require coverage under the Industrial General NPDES Permit and shall implement and maintain activity specific BMPs listed in Table 19 (BMPs for Public Agency Facilities and Activities).

Many municipalities use third-party contractors to conduct municipal maintenance activities in lieu of using municipal employees. Contractors performing activities that can affect storm water quality must be held to the same standards as the Permittee. Not only must these expectations be defined in contracts between the Permittee and its contractors, but the Permittee is responsible for ensuring, through contractually-required documentation or periodic site visits, that contractors are using storm water

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controls and following standard operating procedures. Therefore, the Permittee shall ensure all contractors hired by the Permittee to conduct Public Agency Activities including, but not limited to, storm and/or sanitary sewer system inspection and repair, street sweeping, trash pick-up and disposal, and street and right-of-way construction and repair shall be contractually required to implement and maintain the activity specific BMPs listed in Table 18.

v. Vehicle and Equipment Washing

Specific BMPs for all fixed vehicle and equipment washing; including fire fighting and emergency response vehicles have been incorporated into this Order and must be implemented. In addition, specific BMPs for wash waters from vehicle and equipment washing. These requirements effectively prohibit the occurrence of illicit discharges resulting from unauthorized washing activities.

vi. Landscape, Park, and Recreational Facilities Management

Specific BMPs for public right-of-ways, flood control facilities and open channels, lakes and reservoirs, and landscape, park, and recreation facilities and activities have been included this Order, similar to those in Order No. 01-182 and the more recently adopted Ventura County MS4 Permit, and must be implemented. These requirements are reflective of current environmentally responsible practices.

vii. Storm Drain Operation and Maintenance

Specific BMPs for storm drain operations and maintenance have been carried over from Order No. 01-182 into this Order.

Permittees must prioritize catch basins for cleaning activities based on the volume of trash or debris.

The materials removed from catch basins may not reenter the MS4. The material must be dewatered in a contained area and the water treated with an appropriate and approved control measure or discharged to the sanitary sewer. The solid material will need to be stored and disposed of properly to avoid discharge during a storm event. Some materials removed from storm drains and open channels may require special handling and disposal, and may not be authorized to be disposed of in a landfill.

viii. Streets, Roads, and Parking Facilities Maintenance

Permittees must prioritize streets and/or street segments for sweeping activities based on the volume of trash generated on the street or street segments. Based on these established priorities, Permittees must conduct street sweeping twice per month on the highest priority streets (Priority A), once per month on the medium priority streets (Priority B), and as needed

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but not less than once per year on the lowest priority streets (Priority C). In addition parking facilities must be cleaned using street sweeping equipment no less than two times per month and inspect no less than two times per month to determine if cleaning is necessary.

Specific BMPs for road reconstruction have been incorporated into this Order and must be followed during road repaving activities.

ix. Emergency Procedures

Permittees are required to conduct repairs of essential public service systems and infrastructure in emergency situations. These requirements ensure the protection of water quality. BMPs must be implemented to reduce the threat to water quality and the Regional Water Board must be notified of the occurrence, an explanation of the circumstances and measures taken to reduce the threat to water quality within 30 business days after the emergency has passed.

x. Municipal Employee and Contractor Training

Permittees are required to ensure that training is provided for employees and contractors that have job duties or participate in activities that have the potential to affect storm water quality. The training should promote a general understanding of the potential for activities to pollute storm water and include information on the identification of opportunities to require, implement, and maintain BMPs associated with the activities they perform. In addition training specific to employees or contractors that use or have the potential to use pesticides or fertilizers should be provided. This training should instruct employees and contractors on the potential for pesticide-related surface water toxicity, the proper use, handling and disposal of pesticides, the least toxic methods of pest prevention and control, and the overall reduction of pesticide use.

Many municipalities use third-party contractors to conduct municipal maintenance activities in lieu of using municipal employees. Contractors performing activities that can affect storm water quality must be held to the same standards as the Permittee. Not only must these expectations be defined in contracts between the Permittee and its contractors, but the Permittee is responsible for ensuring, through contractually-required documentation or periodic site visits, that contractors are using storm water controls and following standard operating procedures.

9. Illicit Connection and Illicit Discharge Elimination Program

a. Legal Authority

A proposed management program “shall be based on a description of a program, including a schedule, to detect and remove (or require the discharger to the municipal storm sewer to obtain a separate NPDES permit for) illicit discharges

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and improper disposal into the storm sewer,” per 40 CFR section 122.26(d)(2)(iv)(B). A Permittee must include in its proposed management program “a program, including inspections, to implement and enforce an ordinance, orders or similar means to prevent illicit discharges to the municipal storm sewer system,” per subsection (1) of the above federal regulation.

USEPA stormwater regulations define "illicit discharge" as "any discharge to a municipal separate storm sewer that is not composed entirely of stormwater" except discharges resulting from fire fighting activities and discharges from NPDES permitted sources (see 40 CFR section 122.26(b)(2)). The applicable regulations state that the following non-stormwater discharges may be allowed if they are not determined to be a significant source of pollutants to the MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR section 35.2005(20)), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water. If, however, these discharges are determined to be a significant source of pollution then they must be prohibited.

Examples of common sources of illicit discharges in urban areas include apartments and homes, car washes, restaurants, airports, landfills, and gas stations. These so called "generating sites" discharge sanitary wastewater, septic system effluent, vehicle wash water, washdown from grease traps, motor oil, antifreeze, gasoline and fuel spills, among other substances. Although these illicit discharges can enter the storm drain system in various ways, they generally result from either direct connections (e.g., wastewater piping either mistakenly or deliberately connected to the storm drains) or indirect connections (e.g., infiltration into the storm drain system, spills, or "midnight dumping"). Illicit discharges can be further divided into those discharging continuously and those discharging intermittently.

b. Illicit Discharge Source Investigation and Elimination

Section 402(p)(3)(B)(ii) of the CWA requires MS4 permits to “effectively prohibit non-stormwater discharges into the storm sewers.” The permit implements this requirement, in part by requiring the development of procedures to investigate and eliminate illicit discharges. The permittee must develop a clear, step-by-step procedure for conducting the investigation of illicit discharges. The procedure must include an investigation protocol that clearly defines what constitutes an illicit discharge and what steps shall be taken to identify and eliminate its source. In many circumstances, sources of intermittent, illicit discharges are very difficult to locate, and these cases may remain unresolved. The permit requires that each case be conducted in accordance with the procedures developed to locate the source and conclude the investigation, after which the case may be considered closed. These procedures should be completed per the Progressive Enforcement

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Policy identified in Part VI.D.2 of this Order and should include enforcement as necessary to ensure the elimination of the illicit discharge/connection.

Illicit discharges may also originate in upstream jurisdictions and therefore this Order establishes procedures for communicating with upstream entities and providing information that may prove helpful in their investigation of its source(s).

If a Permittee is unable to eliminate an ongoing illicit discharge following full execution of its legal authority and in accordance with its Progressive Enforcement Policy, or other circumstances prevent the full elimination of an ongoing illicit discharge, including the inability to find the responsible party/parties, the Permittee shall provide for diversion of the entire flow to the sanitary sewer or provide treatment. In either instance, the Permittee shall notify the Regional Water Board in writing within 30 days of such determination and shall provide a written plan for review and comment that describes the efforts that have been undertaken to eliminate the illicit discharge, a description of the actions to be undertaken, anticipated costs, and a schedule for completion. The goal of these requirements is to provide a permanent solution for ongoing illicit discharges.

c. Identification and Response to Illicit Connections

Illicit connections to the MS4 can lead to the direct discharge or infiltration of sewage or other prohibited discharges into the MS4. Permittees have been conducting illicit connection screening throughout the term of Order No. 01-182 and this Order requires a continuation of response efforts once an illicit connection is identified. This Order establishes unique obligations for the LACFCD and for the individual Permittees. The requirements for LACFCD are based on the unique obligations and infrastructure of a regional flood control district. Requirements for the individual Permittees require the investigation and follow-up of all illicit connections within 21 days of identification and elimination within 180 days.

d. Public Reporting of Non-Storm Water Discharges and Spills

Each Permittee needs to promote a program to help in the identification and termination of illicit discharges. This Order establishes requirements for the Permittees, individually or as a group, to develop public education campaigns and reporting numbers which are intended to promote public reporting of illicit discharges. Specifically, a stormwater hotline can be used to help permittees become aware of and mitigate spills or dumping incidents. Spills can include everything from an overturned gasoline tanker to sediment leaving a construction site to a sanitary sewer overflow entering into a storm drain. Permittees must set up a hotline consisting of any of the following (or combination thereof): a dedicated or non-dedicated phone line, E-mail address, or website.

This Order also requires development of written procedures for receiving and responding to calls from the public and for maintaining documentation about

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reported illicit discharges and spills and their investigation and remedy. These requirements are intended to ensure that reliable and consistent practices are deployed to address this persistent problem.

e. Spill Response Plan

Spills, leaks, sanitary sewer overflows, and illicit dumping or discharges can introduce a range of stormwater pollutants into the storm system. Prompt response to these occurrences is the best way to prevent or reduce negative impacts to waterbodies. The permittee must develop a spill response plan that includes an investigation procedure similar to or in conjunction with the investigation procedures developed for illicit discharges in general. Often, a different entity might be responsible for spill response in a community (i.e. fire department), therefore, it is imperative that adequate communication exists between stormwater and spill response staff to ensure that spills are documented and investigated in a timely manner.

f. Illicit Connection and Illicit Discharge Education and Training

The permit requires each Permittee to train field staff, who may come into contact or observe illicit discharges, on the identification and proper procedures for reporting illicit discharges. Field staff to be trained may include, but are not limited to, municipal maintenance staff, inspectors, and other staff whose job responsibilities regularly take them out of the office and into areas within the MS4 area. Permittee field staff are out in the community every day and are in the best position to locate and report spills, illicit discharges, and potentially polluting activities. With proper training and information on reporting illicit discharges easily accessible, these field staff can greatly expand the reach of the IDDE program.

10. Los Angeles County Flood Control District Section

Due to the unique characteristics of the Los Angeles County Flood Control District, a Minimum Control Measure Section unique to the Los Angeles County Flood Control District was included in the Order. Unlike other Permittees, the LACFCD does not own or operate any municipal sanitary sewer systems, public streets, roads, or highways. Additionally, The LACFCD has no planning, zoning, development permitting or other land use authority over industrial or commercial facilities, new developments or re-development projects, or development construction sites located in any incorporated or unincorporated areas within its service area. The Permittees that have such land use authority are responsible for implementing a storm water management program to inspect and control pollutants from industrial and commercial facilities, new development and re-development projects, and development construction sites within their jurisdictional boundaries. The requirements included in the Section are the same as those for other Permittees, but requirements that are not applicable due to the unique characteristic of the Los Angeles County Flood Control District were eliminated.

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D. Total Maximum Daily Load Provisions

Clean Water Act section 303(d)(1)(A) requires each State to conduct a biennial assessment of its waters, and identify those waters that are not achieving water quality standards. These waters are identified as impaired on the State's Clean Water Act section "303(d) List" of water quality limited segments. The Clean Water Act also requires States to establish a priority ranking for waters on the 303(d) List and to develop and implement Total Maximum Daily Loads (TMDLs) for these waters. A TMDL specifies the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and allocates the acceptable pollutant load to point and nonpoint sources. The elements of a TMDL are described in 40 CFR sections 130.2 and 130.7. A TMDL is defined as "the sum of the individual waste load allocations for point sources and load allocations for nonpoint sources and natural background" (40 CFR § 130.2). Regulations further require that TMDLs must be set at "levels necessary to attain and maintain the applicable narrative and numeric water quality standards with seasonal variations and a margin of safety that takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality" (40 CFR section 130.7(c)(1)). The regulations at 40 CFR section 130.7 also state that TMDLs shall take into account critical conditions for stream flow, loading and water quality parameters. Essentially, TMDLs serve as a backstop provision of the CWA designed to implement water quality standards when other provisions have failed to achieve water quality standards.

Upon establishment of TMDLs by the State or the USEPA, the State is required to incorporate, or reference, the TMDLs in the State Water Quality Management Plan (40 CFR sections 130.6(c)(1) and 130.7). The Regional Water Board's Basin Plan, and applicable statewide plans, serves as the State Water Quality Management Plan governing the watersheds under the jurisdiction of the Regional Water Board. When adopting TMDLs as part of its Basin Plan, the Regional Water Board includes, as part of the TMDL, a program for implementation of the WLAs for point sources and load allocations (LAs) for nonpoint sources.

TMDLs are not self-executing, but instead rely upon further Board orders to impose pollutant restrictions on discharges to achieve the TMDL's WLAs. Section 402(p)(3)(B)(iii) of the Clean Water Act requires the Regional Water Board to impose permit conditions, including: "management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator of the State determines appropriate for the control of such pollutants." (emphasis added.) Section 402(a)(1) of the Clean Water Act also requires states to issue permits with conditions necessary to carry out the provisions of the Clean Water Act. Federal regulations also require that NPDES permits must include conditions consistent with the assumptions and requirements of any available waste load allocation (40 CFR section 122.44(d)(1)(vii)(B)). Similarly, state law requires both that the Regional Water Board implement its Basin Plan when adopting waste discharge requirements (WDRs) and that NPDES permits apply "any more stringent effluent standards or limitations

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necessary to implement water quality control plans...” (Cal. Wat. Code §§ 13263, 13377).

An NPDES permit should incorporate the WLAs as numeric WQBELs, where feasible. Where a non-numeric permit limitation is selected, such as BMPs, the permit’s administrative record must support the expectation that the BMPs are sufficient to achieve the WLAs. (40 CFR §§ 124.8, 124.9, and 124.18.) The USEPA has published guidance for establishing WLAs for storm water discharges in TMDLs and their incorporation as numeric WQBELs in MS4 permits.³⁷

As required, permit conditions are included in this Order consistent with the assumptions and requirements of the available WLAs assigned to MS4 discharges, which have been established in thirty-three TMDLs. The Regional Water Board adopted twenty-five (25) TMDLs and USEPA established seven (7) TMDLs that assign WLAs to MS4 Permittees within the County of Los Angeles. In addition, the Santa Ana Regional Water Board adopted a TMDL that assigns WLAs to the Cities of Pomona and Claremont. The TMDLs included in this Order along with the adoption and approval dates are listed in the table below. Permit conditions for two of these TMDLs – the Marina del Rey Harbor Bacteria TMDL and the Los Angeles River Watershed Trash TMDL – were previously incorporated into Order No. 01-182 during re-openers in 2007 and 2009, respectively (Orders R4-2007-0042 and R4-2009-0130). TMDLs are typically developed on a watershed or subwatershed basis, which facilitates a more accurate assessment of cumulative impacts of pollutants from all sources. An overview of each Watershed Management Area, including the TMDLs applicable to it, is provided below.

TMDLs with Resolution Numbers, Adoption Dates and Effective Dates

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³⁷ USEPA (2010) “Revisions to the November 22, 2002 Memorandum ‘Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those TMDLs’.” Issued by James A. Hanlon, Director, Office of Wastewater Management and Denise Keehner, Director, Office of Wetlands, Oceans and Watersheds. November 12, 2010.

TOTAL MAXIMUM DAILY LOAD	RESOLUTION NUMBER	ADOPTION DATE	STATE BOARD RESOLUTION NUMBER	STATE BOARD APPROVAL DATE	OAL APPROVAL DATE	EPA APPROVAL DATE	EFFECTIVE DATE
Santa Clara River Watershed Management Area							
Santa Clara River Nitrogen Compounds TMDL	2003-011	8/7/2003	2003-0073	11/19/2003	2/27/2004	3/18/2004	3/23/2004
Upper Santa Clara River Chloride TMDL	2008-012	12/11/2008	2009-0077	10/20/2009	1/26/2010	4/6/2010	4/6/2010
Lake Elizabeth, Munz Lake, and Lake Hughes Trash TMDL (Lake Elizabeth only)	2007-009	6/7/2007	2007-0073	12/4/2007	2/8/2008	2/27/2008	3/6/2008
Santa Clara River Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL	R10-006	7/8/2010	2011-0048	10/4/2011	12/19/2011	1/13/2012	3/21/2012
Santa Monica Bay Watershed Management Area							
Santa Monica Bay Beaches Bacteria TMDL (Dry Weather)	2002-004	1/24/2002	2002-0149	9/19/2002	12/9/2002	6/19/2003	7/15/2003
Santa Monica Bay Beaches Bacteria TMDL (Wet Weather)	2002-022	12/12/2002	2003-0022	3/19/2003	5/20/2003	6/19/2003	7/15/2003
Santa Monica Bay Nearshore and Offshore Debris TMDL	R10-010	11/4/2010	2011-0064	12/6/2011	3/15/2012	3/20/2012	3/20/2012
Santa Monica Bay TMDL for DDTs and PCBs (USEPA established)	N/A	N/A	N/A	N/A	N/A	3/26/2012	N/A
Malibu Creek Subwatershed							
Malibu Creek and Lagoon Bacteria TMDL	2004-019R	12/13/2004	2005-0072	9/22/2005	12/1/2005	1/10/2006	1/24/2006
Malibu Creek Watershed Trash TMDL	2008-007	5/1/2008	2009-0029	3/17/2009	6/16/2009	6/26/2009	7/7/2009
Malibu Creek Watershed Nutrients TMDL (USEPA established)	N/A	N/A	N/A	N/A	N/A	3/21/2003	N/A
Ballona Creek Subwatershed							
Ballona Creek Trash TMDL	2004-023	3/4/2004	2004-0059	9/30/2004	2/8/2005	N/A	8/11/2005
Ballona Creek Estuary Toxic Pollutants TMDL	2005-008	7/7/2005	2005-0076	10/20/2005	12/15/2005	12/22/2005	1/11/2006
Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL	2006-011	6/8/2006	2006-0092	11/15/2006	2/20/2007	3/26/2007	4/27/2007

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Ballona Creek Metals TMDL	2007-015	9/6/2007	2008-0045	6/17/2008	10/6/2008	10/29/2008	10/29/2008
Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation (USEPA established)	N/A	N/A	N/A	N/A	N/A	3/26/2012	N/A
Marina del Rey Subwatershed							
Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL	2003-012	8/7/2003	2003-0072	11/19/2003	1/30/2004	3/18/2004	3/18/2004
Marina del Rey Harbor Toxic Pollutants TMDL	2005-012	10/6/2005	2006-0006	1/13/2006	3/13/2006	3/16/2006	3/22/2006
Dominguez Channel and Greater Harbors Waters Watershed Management Area							
Los Angeles Harbor Bacteria TMDL (Inner Cabrillo Beach and Main Ship Channel)	2004-011	7/1/2004	2004-0071	10/21/2004	1/5/2005	3/1/2005	3/10/2005
Machado Lake Trash TMDL	2007-006	6/7/2007	2007-0075	12/4/2007	2/8/2008	2/27/2008	3/6/2008
Machado Lake Nutrient TMDL	2008-006	5/1/2008	2008-0089	12/2/2008	2/19/2009	3/11/2009	3/11/2009
Machado Lake Pesticides and PCBs TMDL	R10-008	9/2/2010	2011-0065	12/6/2011	2/29/2012	3/20/2012	3/20/2012
Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL	R11-008	5/5/2011	2012-0008	2/7/2012	3/21/2012	3/23/2012	3/23/2012
Los Angeles River Watershed Management Area							
Los Angeles River Watershed Trash TMDL	2007-012	8/9/2007	2008-0024	4/15/2008	7/1/2008	7/24/2008	9/23/2008
Los Angeles River Nitrogen Compounds and Related Effects TMDL	2003-016	12/4/2003	2004-0014	3/24/2004	9/27/2004	N/A	9/27/2004
Los Angeles River and Tributaries Metals TMDL	R10-003	5/6/2010	2011-0021	4/19/2011	7/28/2011	11/3/2011	11/3/2011
Los Angeles River Bacteria TMDL	R10-007	7/9/2010	2011-0056	11/1/2011	3/21/2012	3/23/2012	3/23/2012
<u>Legg Lake Trash TMDL</u>	<u>2007-010</u>	<u>6/7/2007</u>	<u>2007-0074</u>	<u>12/4/2007</u>	<u>2/5/2008</u>	<u>2/27/2008</u>	<u>3/6/2008</u>
Long Beach City Beaches and Los	N/A	N/A	N/A	N/A	N/A	3/26/2012	N/A

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Angeles River Estuary Bacteria TMDL (USEPA established)							
Los Angeles Area Lakes TMDLs (USEPA established for Lake Calabasas, Echo Park Lake, <u>Legg Lake</u> and Peck Road Park Lake)	N/A	N/A	N/A	N/A	N/A	3/26/2012	N/A
San Gabriel River Watershed Management Area							
San Gabriel River and Impaired Tributaries Metals and Selenium TMDL (USEPA established)	N/A	N/A	N/A	N/A	N/A	3/26/2007	N/A
Legg Lake Trash TMDL	2007-010	6/7/2007	2007-0074	12/4/2007	2/5/2008	2/27/2008	3/6/2008
Los Angeles Area Lakes TMDLs (USEPA established for Legg Lake and Puddingstone Reservoir)	N/A	N/A	N/A	N/A	N/A	3/26/2012	N/A
Los Cerritos Channel and Alamitos Bay Watershed Management Area							
Los Cerritos Channel Metals TMDL (USEPA established)	N/A	N/A	N/A	N/A	N/A	3/17/2010	N/A
Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL	R09-005	10/1/2009	2010-0056	11/16/2010	5/6/2011	6/14/2011	7/28/2011
Middle Santa Ana River Watershed Management Area (Santa Ana Region TMDL)							
Middle Santa Ana River Watershed Bacteria Indicator TMDLs	R8-2005-0001	8/26/2005	2006-0030	5/15/2006	9/1/2006	5/16/2007	5/16/2007

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Santa Clara River Watershed Management Area. The Santa Clara River and its tributaries drain a watershed area of 1,634 square miles (sq. miles) (Figure B-1). Santa Clara River Reaches 1, 2, 3, 4A, 4B and major tributaries Santa Paula, Sespe and Piru Creeks are in Ventura County. Santa Clara River Reaches 5, 6, 7, 8 and major tributaries Castaic, San Francisquito, and Bouquet Canyon Creeks are in Los Angeles County. About 40% of the watershed, the Upper Santa Clara River, is located in County of Los Angeles. Approximately, 75% of the Upper Santa Clara River watershed is open space used for recreation in the Angeles National Forest. The remainder of the upper portion of the watershed is characterized by a mixture of residential, mixed urban, and industrial land uses with low density residential more common in the uppermost areas of the watershed, while high density residential is more prevalent in the City of Santa Clarita.

Various reaches of the Santa Clara River are on the 2010 CWA Section 303(d) List of impaired water bodies for nitrogen, bacteria, chloride, and trash (in lakes), among other pollutants. The excess nitrogen compounds are causing impairments to the WARM, WILD, and GWR designated beneficial uses of the Santa Clara River in Reaches 3, 7 and 8. The elevated bacterial indicator densities are causing impairment of the REC-1 and REC-2 designated beneficial uses for the Santa Clara River Estuary and Reaches 3, 5, 6, and 7. The excessive levels of chloride are impairing the AGR and GWR designated beneficial uses of the Upper Santa Clara River Reaches 4A, 4B, 5 and 6. The trash in Lake Elizabeth is causing impairments to the WARM, WILD, RARE, REC-1 and REC-2 designated beneficial uses.

TMDLs have been adopted by the Regional Water Board to address the impairments due to nitrogen, bacteria and chloride in the Upper Santa Clara River Watershed and for trash in Lake Elizabeth. Each of these TMDLs identifies MS4 discharges as a source of pollutants and assigns allocations to MS4 discharges. In the nitrogen compounds TMDL, storm water discharges were identified as potentially contributing nitrogen loads. Data from land use monitoring conducting under the LA County MS4 Permit from 1994-1999 indicate some concentrations of ammonia from commercial land uses in excess of the 30-day average concentration based WLA of 1.75 mg/l, and potential concentrations of nitrate-N and nitrite-N from residential land uses in excess of the WLA of 6.8 mg/l. Recent data from the 2010-11 annual monitoring report indicate low levels of ammonia and nitrite at the mass emissions station (S29) in the Santa Clara River, and concentrations of nitrate-N ranging from 1.38-1.66 mg/l in dry weather and 0.015-1.86 mg/l in wet weather. In the chloride TMDL, major point sources are assigned a WLA of 100 mg/l. Data from land use monitoring conducted under the LA County MS4 Permit from 1994-99 indicate chloride concentrations ranging from 3.2-48 mg/l, while more recent data from the mass emissions station (S29) indicate concentrations ranging from 116-126 mg/l in dry weather, and 25.1-96.3 mg/l in wet weather. For the bacteria TMDL, the Regional Water Board found that the significant contributors of bacteria loading to the Santa Clara River are discharges of storm water and non-storm water from the MS4. For the trash TMDL, discharges from the MS4 are sources of trash discharged to Lake Elizabeth.

Santa Monica Bay Watershed Management Area. The Santa Monica Bay Watershed Management Area (WMA) encompasses an area of 414 sq. miles (Figure B-2). Its

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borders reach from the crest of the Santa Monica Mountains on the north and from the Ventura-Los Angeles County line to downtown Los Angeles. From there it extends south and west across the Los Angeles plain to include the area east of Ballona Creek and north of the Baldwin Hills. A narrow strip of land between Playa del Rey and Palos Verdes drains to the Bay south of Ballona Creek. The WMA includes several subwatersheds, the two largest being Malibu Creek to the north (west) and Ballona Creek to the south. SCAG land use data from 2005 shows 62% of the area is open space, high density residential is 17% of the area, and low density residential is 2.3% of the area. Commercial and industrial land uses total 6% of the area and are found in all but a handful of the subwatersheds.

Many of the Santa Monica Bay beaches were identified on the 1998 CWA Section 303(d) List of impaired water bodies for high coliform counts and beach closures. Santa Monica Bay offshore and nearshore is on the 2010 CWA Section 303(d) List of impaired water bodies for debris, DDTs, PCBs and sediment toxicity. The elevated bacterial indicator densities during both dry and wet weather are causing impairments of the REC-1 and REC-2 designated beneficial uses of the Santa Monica Bay beaches. The debris and elevated concentrations of DDT and PCBs are causing impairments to the IND, NAV, REC-1, REC-2, COMM, EST, MAR, BIOL, MIGR, WILD, RARE, SPWN, SHELL, and WET designated beneficial uses of the Santa Monica Bay.

TMDLs have been adopted by the Regional Water Board and USEPA for bacteria at Santa Monica Bay Beaches, and for debris, DDTs, PCBs and sediment toxicity in Santa Monica Bay. In the bacteria TMDL, the Regional Water Board determined that discharges of storm water and non-storm water from the MS4 are the primary source of elevated bacterial indicator densities to Santa Monica Bay beaches during dry and wet weather. In the debris TMDL, the Regional Water Board determined that most of the land-based debris is discharged to the marine environment through the MS4. In the DDT and PCBs TMDL, USEPA determined that although DDT is no longer used, it persists in the environment, adhering strongly to soil particles. The manufacture of PCBs is no longer legal, but PCBs also persist in the environment and are inadvertently produced as a result of some manufacturing processes. Both DDT and PCBs are transported in contaminated sediments via urban runoff through the MS4 to Santa Monica Bay.

The Malibu Creek subwatershed drains an area of about 109 square miles (Figure B-2a). Approximately two-thirds of this subwatershed lies in Los Angeles County and the remaining third in Ventura County. Much of the land is part of the Santa Monica Mountains National Recreation Area and is under the purview of the National Parks Service. The watershed borders the eastern portion of Ventura County to the west and north and Los Angeles River watershed to the east. Major tributaries include Cold Creek, Lindero Creek, Las Virgenes Creek, Medea Creek, and Triunfo Creek. Located at the end of and receiving flows from Malibu Creek is the 40-acre Malibu Lagoon. The Malibu Creek subwatershed land uses are 88% open space, 3% commercial/light industry, 9% residential and less than 1% public.

The Malibu Creek Watershed is on the 2010 CWA Section 303(d) List of impaired water bodies for bacteria, nutrients, and trash. Elevated bacterial indicator densities are

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causing impairment of the REC-1 and REC-2 designated beneficial uses of Malibu Creek, Malibu Lagoon, and the adjacent beaches. Excess nutrients are causing impairments to the REC-1, REC-2, WARM, COLD, EST, MAR, WILD, RARE, MIGR, and SPWN designated beneficial uses of waterbodies in the Malibu Creek Watershed. Trash is causing impairments to the MUN, GWR, REC-1, REC-2, WARM, COLD, MIGR, WILD, RARE, SPWN, and WET designated beneficial uses of the waterbodies in the Malibu Creek Watershed.

TMDLs have been adopted by the Regional Water Board for bacteria and trash in Malibu Creek. USEPA established a TMDL for nutrients in Malibu Creek. Fecal coliform bacteria may be introduced from a variety of sources including storm water and non-storm water discharges from the MS4. USEPA determined that high nitrogen and phosphorus loadings are associated with storm water discharges from commercial and residential land uses and also from undeveloped areas. During the summer non-storm water discharges add a significant portion of the load. The Regional Water Board determined in the trash TMDL that discharges from the MS4 are a source of trash to waterbodies in the Malibu Creek Watershed.

Ballona Creek and its tributaries drain a subwatershed of about 127 square miles (Figure B-2b). The watershed boundary extends in the east from the crest of the Santa Monica Mountains southward and westward to the vicinity of central Los Angeles and thence to Baldwin Hills. Tributaries of Ballona Creek include Centinela Creek, Sepulveda Canyon Channel, Benedict Canyon Channel, and numerous other storm drains. Ballona Creek is concrete lined upstream of Centinela Boulevard. All of its tributaries are either concrete channels or covered culverts. The channel downstream of Centinela Boulevard is trapezoidal composed of grouted rip-rap side slopes and an earth bottom. The urbanized areas of Ballona Creek, which consists of residential and commercial properties, accounts for 80% of the watershed; the partially developed foothill and mountains make up the other 20%.

Ballona Creek and Ballona Creek Estuary is on the 2010 CWA Section 303(d) List for trash, toxicity, bacteria, and metals. The Ballona Creek Wetlands is on the 2010 CWA Section 303(d) List for trash, exotic vegetation, habitat alterations and hydromodification. Trash is causing impairments to the REC-1, REC-2, WARM, WILD, EST, MAR, RARE, MIGR, SPWN, COMM, WET, and COLD designated beneficial uses of Ballona Creek. A suite of toxic pollutants, including cadmium, copper, lead, silver, zinc, chlordane, DDT, PCBs, and PAHs in sediments and dissolved copper, dissolved lead, total selenium, and dissolved zinc, are causing impairments to the REC-1, REC-2, EST, MAR, WILD, RARE, MIGR, SPWN, COMM, and SHELL designated beneficial uses of Ballona Creek Estuary and Ballona Creek and Sepulveda Channel, respectively. The elevated bacterial indicator densities are causing impairment of the REC-1, LREC-1, and REC-2 designated beneficial uses of Ballona Creek and Ballona Estuary. The excess sediment and invasive exotic vegetation is causing impairments to the EST, MIGR, RARE, REC-1, REC-2, SPWN, WET, and WILD designated beneficial uses of the Ballona Creek Wetlands.

TMDLs have been adopted by the Regional Water Board for trash, metals and toxic pollutants in Ballona Creek and Estuary, and bacteria. USEPA established a TMDL for

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Sediment and Invasive Exotic Vegetation in the Ballona Creek Wetlands. Stormwater discharge is the major source of trash in Ballona Creek. Urban storm water has been recognized as a substantial source of metals. Storm drains convey a large percentage of the metals loadings during dry weather because although their flows are typically low, concentrations of metals in urban runoff may be quite high. Because metals are typically associated with fine particles in storm water runoff, they have the potential to accumulate in estuarine sediments where they may pose a risk of toxicity. Similar to metals, the majority of organic constituents in storm water are associated with particulates. There is toxicity associated with suspended solids in urban runoff discharged from Ballona Creek, as well as with the receiving water sediments. This toxicity is likely attributed to metals and organics associated with the suspended sediments. The major contributors of flows and associated bacteria loading to Ballona Creek and Ballona Estuary are storm water and non-storm water discharges from the MS4. The potential for sediment loading into the Ballona Creek Wetlands is associated with the flow coming down the watershed. Sediment moves from the watershed through the MS4 as a result of storms, wind and land based runoff. Major storms usually take place in winter and are responsible for major movements of sediment down the watershed into Ballona Creek and Ballona Wetland towards the coastal waterbodies. These activities can lead to discharge of large quantities of sediments in runoff.

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The Marina del Rey subwatershed is approximately 2.9 square miles located adjacent to the mouth of Ballona Creek. The Marina del Rey subwatershed is highly developed at 80%, the remaining 20% is split between water and open/recreation land uses.

Marina del Rey is on the 2010 CWA Section 303(d) List for bacteria and sediment concentrations of copper, lead, zinc, DDT, PCBs, chlordanes, and sediment toxicity. The elevated bacterial indicator densities are causing impairment of the REC-1 and REC-2 designated beneficial uses at Marina del Rey Harbor Mothers' Beach and back basins. The toxic pollutants are causing impairments to the REC-1, MAR, WILD, COMM, and SHELL designated beneficial uses of the Marina del Rey Harbor.

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TMDLs have been adopted by the Regional Water Board for bacteria and toxic pollutants. Non-storm water and storm water discharges from the MS4 are the primary sources of elevated bacterial indicator densities to Marina del Rey Harbor Mothers' Beach and back basins during dry and wet weather. Urban storm water has been recognized as a substantial source of metals. Numerous researchers have documented that the most prevalent metals in urban storm water (i.e., copper, lead, and zinc) are consistently associated with suspended solids. Because metals are typically associated with fine particles in storm water runoff, they have the potential to accumulate in marine sediments where they may pose a risk of toxicity. Similar to metals, the majority of organic constituents in storm water are associated with particulates.

Dominguez Channel and Greater Harbor Waters Watershed Management Area. The Dominguez Channel and Los Angeles/Long Beach Harbors Watershed Management Area (Dominguez WMA) is located in the southern portion of the Los Angeles Basin (Figure B-3). Los Angeles Harbor is 7,500 acres and the Long Beach Harbor is 7,600 acres; together they have an open water area of approximately 8,128 acres. The 15 mile-long Dominguez Channel drains a densely urbanized area to Inner

Los Angeles Harbor. Near the end of the 19th century and during the beginning of the next century, channels were dredged, marshes were filled, wharves were constructed, the Los Angeles River was diverted, and breakwaters were constructed in order to allow deep draft ships to be directly offloaded at the docks. The Dominguez Slough was completely channelized and became the drainage endpoint for runoff from a highly industrialized area. Eventually, the greater San Pedro Bay was enclosed by two more breakwaters and deep entrance channels were dredged to allow for entry of ships.

Various reaches of the Dominguez WMA are on the 2010 CWA Section 303(d) List of impaired water bodies for metals, DDT, PCBs, PAHs, historic pesticides, coliform, and sediment toxicity. The elevated bacteria indicator densities is causing impairments to the SHELL, REC-1, and REC-2 designated beneficial uses of Los Angeles Harbor. The elevated levels of metals and organics are causing impairments to beneficial uses designated in these waters to protect aquatic life, including MAR and RARE. In addition, the elevated levels are causing impairments in the estuaries, which are designated with SPWN, MIGR, and WILD beneficial uses. Dominguez Channel also has an existing designated use of WARM and the Los Angeles River Estuary has the designated use of WET. Beneficial uses associated with human use of these waters that are impaired due to the elevated concentrations of metals and organics include REC-1, REC-2, IND, NAV, COMM, and SHELL.

TMDLs have been adopted by the Regional Water Board for toxic pollutants in the Dominguez WMA and for bacteria at Inner Cabrillo Beach and the Main Ship Channel. Discharges from the MS4 are a source of elevated bacterial indicator densities to Inner Cabrillo Beach and the Main Ship Channel during dry and wet weather. The major point sources of organochlorine pesticides, PCBs, and metals into Dominguez Channel are storm water and non-storm water discharges. The contaminated sediments are a reservoir of historically deposited pollutants. Storm water runoff from manufacturing, military facilities, fish processing plants, wastewater treatment plants, oil production facilities, and shipbuilding or repair yards in both Ports have discharged untreated or partially treated wastes into Harbor waters. Current activities also contribute pollutants to Harbor sediments, in particular, storm water runoff.

Machado Lake is listed for trash, nutrients, PCBs and historic pesticides. Trash, nutrients and toxic pollutants are causing impairments to the WARM, WET, RARE, WILD, REC-1 and REC-2 designated beneficial uses of Machado Lake. TMDLs have been adopted by the Regional Water Board for trash, nutrients, PCBs and pesticides for Machado Lake. The point sources of trash and nutrients into Machado Lake are storm water and non-storm water discharges from the MS4. Storm water discharges occur through the following sub-drainage systems: Drain 553, Wilmington Drain, Project 77/510, and Walteria Lake.

Los Angeles River Watershed Management Area. The Los Angeles River Watershed Management Area (LAR WMA) drains a watershed of 824 square miles (Figure B-4). The LAR WMA is one of the largest in the Region and is also one of the most diverse in terms of land use patterns. Approximately 324 square miles of the watershed are covered by forest or open space land including the area near the headwaters, which originate in the Santa Monica, Santa Susana, and San Gabriel

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Mountains. The remainder of the watershed is highly developed. The river flows through the San Fernando Valley past heavily developed residential and commercial areas. From the Arroyo Seco, north of downtown Los Angeles, to the confluence with the Rio Hondo, the river flows through industrial and commercial areas and is bordered by rail yards, freeways, and major commercial and government buildings. From the Rio Hondo to the Pacific Ocean, the river flows through industrial, residential, and commercial areas, including major refineries and petroleum products storage facilities, major freeways, rail lines, and rail yards serving the Ports of Los Angeles and Long Beach. Due to major flood events at the beginning of the century, by the 1950s most of the LA River was lined with concrete. In the San Fernando Valley, there is a section of the river with a soft bottom at the Sepulveda Flood Control Basin. At the eastern end of the San Fernando Valley, the river bends around the Hollywood Hills and flows through Griffith and Elysian Parks, in an area known as the Glendale Narrows. Since the water table was too high to allow laying of concrete, the river in this area has a rocky, unlined bottom with concrete-lined or rip-rap sides. South of the Glendale Narrows, the river is contained in a concrete-lined channel down to Willow Street in Long Beach. The LA River tidal prism/estuary begins in Long Beach at Willow Street and runs approximately three miles before joining with Queensway Bay. The channel has a soft bottom in this reach with concrete-lined sides. A number of lakes are also part of the LAR WMA, including Legg Lake, Peck Road Park, Belvedere Park, Hollenbeck Park, Lincoln Park, and Echo Park Lakes as well as Lake Calabasas.

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Various reaches and lakes within the LAR WMA are on the 2010 CWA Section 303(d) List of impaired water bodies for trash, nitrogen compounds and related effects (ammonia, nitrate, nitrite, algae, pH, odor, and scum), metals (copper, cadmium, lead, zinc, aluminum and selenium), bacteria, and historic pesticides. Beneficial uses impaired by trash in the Los Angeles River are REC-1, REC-2, WARM, WILD, EST, MAR, RARE, MIGR, SPWN, COMM, WET and COLD. The excess nitrogen compounds are causing impairments to the WARM and WILD designated beneficial uses of Los Angeles River. Excess metals are causing impairments to the WILD, RARE, WARM, WET, and GWR designated beneficial uses of the Los Angeles River and its tributaries. Elevated indicator bacteria densities are causing impairments to the REC-1 and REC-2 designated beneficial uses of Los Angeles River and the Los Angeles River Estuary. Beneficial uses impaired by trash in Legg Lake include REC1, REC2, and WILD.

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TMDLs have been adopted by the Regional Water Board for trash, nitrogen, metals, and bacteria in the Los Angeles River. USEPA established TMDLs for bacteria in the Los Angeles River Estuary and for various pollutants in Los Angeles Area Lakes. The Los Angeles River Watershed Trash TMDL identifies discharges from the municipal separate storm sewer system as the principal source of trash to the Los Angeles River and its tributaries. The Regional Water Board determined that urban runoff and storm water may contribute to nitrate loads. Discharges from the MS4 contribute a large percentage of the metals loadings during dry weather because although non-storm water flows from the MS4 are typically low relative to other discharges during dry weather, concentrations of metals in urban runoff may be quite high. During wet weather, most of the metals loadings are in the particulate form and are associated with wet-weather storm water flow. On an annual basis, storm water discharges from the MS4 contribute about 40% of the cadmium loading, 80% of the copper loading, 95% of

the lead loading, and 90% of the zinc loading. Discharges from the MS4 are the principal source of bacteria to the Los Angeles River, its tributaries and the Los Angeles River Estuary in both dry weather and wet weather.

A TMDL has been adopted by the Regional Water Board for trash in Legg Lake. The Legg Lake Trash TMDL identifies MS4 storm drains as the principal point source for trash discharged to Legg Lake.

The Los Angeles Water Board identified 10 lakes in the Los Angeles region as impaired by algae, ammonia, chlordane, copper, DDT, eutrophication, lead, organic enrichment/low dissolved oxygen, mercury, odor, PCBs, pH and/or trash and placed them on California's 303(d) list of impaired waters. For several lakes, USEPA concluded that ammonia, pH, copper and/or lead are currently meeting water quality standards and TMDLs are not required at this time. In other lakes, recent chlordane and dieldrin data indicate additional impairment. Associated with this WMA are: Lake Calabastas TMDLs for total nitrogen and total phosphorus; Echo Park Lake TMDLs for nutrients (total nitrogen and total phosphorus), total chlordane, dieldrin, total PCBs, and trash; Legg Lake TMDLs for total nitrogen and total phosphorus; and Peck Road Park Lake TMDLs for nutrients (total nitrogen and total phosphorus), total chlordane, total DDT, dieldrin, total PCBs, and trash.

In Lake Calabastas beneficial uses impaired by elevated levels of nutrients include REC1, REC2, and WARM. At high enough concentrations, WILD and MUN uses could also become impaired. MS4 discharges from the surrounding watershed to Lake Calabastas during dry and wet weather contributes 97.7 percent of the total phosphorus load and 74.4 percent of the total nitrogen load.

In Echo Park Lake beneficial uses impaired by elevated levels of nutrients, PCBs, chlordane, and dieldrin are currently impairing the REC1, REC2, and WARM uses. At high enough concentrations WILD and MUN uses could also become impaired. Beneficial uses impaired by trash in Echo Park Lake include REC1, REC2, WARM and WILD. The Echo Park Lake nutrient TMDL found that MS4 discharges from the northern and southern watershed to Echo Lake contribute 29 percent of the total phosphorus load and 28 percent of the total nitrogen load during wet weather with dry weather loading data unavailable due to the majority of runoff being diverted downstream of the lake. PCBs, chlordane, and dieldrin in Echo Park Lake are primarily due to historical loading and storage within the lake sediments, with some ongoing contribution by watershed wet weather loads. Dry weather loading is assumed to be negligible because hydrophobic contaminants primarily move with particulate matter that is mobilized by higher flows. Storm water loads from the watershed were estimated based on simulated sediment load and observed pollutant concentrations on sediment near inflows to the lake. MS4 discharges via storm drains are the principal point source for trash in Echo Park Lake.

In Legg Lake beneficial uses impaired due to elevated nutrient levels include REC1, REC2, WARM and COLD. At high enough concentrations the WILD, MUN, and GWR uses could also become impaired. The Legg Lake nutrient TMDL found that MS4 discharges from the surrounding watershed to Legg Lake during dry and wet weather

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contributes 69.1 percent of the total phosphorus load and 36 percent of the total nitrogen load.

In Peck Road Park Lake beneficial uses impaired by elevated levels of nutrients, PCBs, chlordane, DDT, dieldrin, and trash are currently impairing the REC1, REC2, and WARM uses. At high enough concentrations WILD and MUN uses could also become impaired. The Peck Road Park Lake nutrient TMDL found that MS4 discharges from the surrounding watershed including both wet and dry weather contribute 80.2 percent of the total phosphorus load and 55.5 percent of the total nitrogen load. PCBs, chlordane, DDT, and dieldrin in Peck Road Park Lake loads are primarily due to historical loading and storage within the lake sediments, with some ongoing contribution by watershed wet weather loads. Dry weather loading is assumed to be negligible because hydrophobic contaminants primarily move with particulate matter that is mobilized by higher flows. Stormwater loads from the watershed were estimated based on simulated sediment load and observed pollutant concentrations on sediment near inflows to the lake. MS4 discharges via storm drains are the principal point source for trash in Peck Road Park Lake.

San Gabriel River Watershed Management Area. The San Gabriel River Watershed (SGR WMA) receives drainage from a 689-square mile area of eastern Los Angeles County (Figure B-5). The main channel of the San Gabriel River is approximately 58 miles long. Its headwaters originate in the San Gabriel Mountains with the East, West, and North Forks. The river empties to the Pacific Ocean at the Los Angeles and Orange Counties boundary in Long Beach. The main tributaries of the river are Big and Little Dalton Wash, San Dimas Wash, Walnut Creek, San Jose Creek, Fullerton Creek, and Coyote Creek. Part of the Coyote Creek subwatershed is in Orange County and is under the authority of the Santa Ana Water Board. A number of lakes and reservoirs are also part of the SGR WMA, including ~~Legg Lake and Puddingstone Reservoir~~. Land use in the watershed is diverse and ranges from predominantly open space in the upper watershed to urban land uses in the middle and lower parts of the watershed.

Various reaches of the SGR WMA are on the 2010 CWA Section 303(d) List of impaired water bodies due to trash, nitrogen, phosphorus, and metals (copper, lead, selenium, and zinc). ~~Beneficial uses impaired by trash in Legg Lake include REC1, REC2, and WILD.~~

~~A TMDL has been adopted by the Regional Water Board for trash in Legg Lake. The Legg Lake Trash TMDL identifies MS4 storm drains as the principal point source for trash discharged to Legg Lake.~~

USEPA established TMDLs for metals and selenium in the San Gabriel River and various pollutants in Los Angeles Area Lakes. Segments of the San Gabriel River and its tributaries exceed water quality objectives for copper, lead, selenium, and zinc. Metals loadings to San Gabriel River are causing impairments of the WILD, WARM, COLD, RARE, EST, MAR, MIGR, SPWN, WET, MUN, IND, AGR, GWR, and PROC beneficial uses. The San Gabriel River metals and selenium TMDL found that the MS4 contributes a large percentage of the metals loadings during dry weather because although their flows are typically low, concentrations of metals in urban runoff may be

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quite high. During wet weather, most of the metals loadings are in the particulate form and are associated with wet-weather storm water flow.

The Regional Water Board identified 10 lakes in the Los Angeles Region as impaired by algae, ammonia, chlordane, copper, DDT, eutrophication, lead, organic enrichment/low dissolved oxygen, mercury, odor, PCBs, pH and/or trash and placed them on California's 303(d) list of impaired waters. For several lakes, USEPA concluded that ammonia, pH, copper and/or lead are currently meeting water quality standards and TMDLs are not required at this time. In other lakes, recent chlordane and dieldrin data indicate additional impairment. Associated with this WMA ~~is are: Legg Lake TMDLs for total nitrogen and total phosphorus; and Puddingstone Reservoir TMDLs for total nitrogen, total phosphorus, total chlordane, total DDT, total PCBs, total mercury, and dieldrin.~~

~~In Legg Lake beneficial uses impaired due to elevated nutrient levels include REC1, REC2, WARM and COLD. At high enough concentrations the WILD, MUN, and GWR uses could also become impaired. The Legg Lake nutrient TMDL found that MS4 discharges from the surrounding watershed to Legg Lake during dry and wet weather contributes 69.1 percent of the total phosphorus load and 36 percent of the total nitrogen load.~~

In Puddingstone Reservoir beneficial uses impaired due to elevated nutrient, mercury, PCBs, chlordane, dieldrin, and DDT levels include REC1, REC2, WARM, and COLD. At high enough concentrations the WILD, MUN, GWR, and RARE uses could also become impaired. The Puddingstone Reservoir nutrients TMDL found that MS4 discharges from the surrounding watershed to Puddingstone Reservoir during dry and wet weather contributes 79.8 percent of the total phosphorus and 74.1 percent of the total nitrogen load. Mercury, PCBs, chlordane, dieldrin, and DDT in Puddingstone Reservoir loads are primarily due to historical loading and storage within the lake sediments, with some ongoing contribution by watershed wet weather loads. Dry weather loading is assumed to be negligible because hydrophobic contaminants primarily move with particulate matter that is mobilized by higher flows. Stormwater loads from the watershed were estimated based on simulated sediment load and observed pollutant concentrations on sediment near inflows to the lake.

Los Cerritos Channel and Alamitos Bay Watershed Management Area. The Los Cerritos Channel is concrete-lined above the tidal prism and drains a small but densely urbanized area of east Long Beach (Figure B-6). The channel's tidal prism starts at Anaheim Road and connects with Alamitos Bay through the Marine Stadium; the wetlands connect to the Channel a short distance from the lower end of the Channel. Alamitos Bay is composed of the Marine Stadium, a recreation facility built in 1932; Long Beach Marina; a variety of public and private berths; and the Bay proper. A small bathing lagoon, Colorado Lagoon located entirely in Long Beach, has a tidal connection with the Bay. The majority of land use in this WMA is high density residential.

Los Cerritos Channel is on the 2010 CWA Section 303(d) List of impaired water bodies for metals (copper, zinc, and lead). Beneficial uses impaired by metals in the Los Cerritos Channel include WILD, REC2 and WARM. USEPA established a TMDL for

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various metals in Los Cerritos Channel. The TMDL for metals in Los Cerritos Channel found that the MS4 contributes a large percentage of the metals loadings during dry weather because although their flows are typically low, concentrations of metals in urban runoff may be quite high. During wet weather, most of the metals loadings are in the particulate form and are associated with wet-weather storm water flow.

Middle Santa Ana River Watershed Management Area. The Middle Santa Ana River Watershed Management Area (MSAR WMA) covers approximately 488 square miles and lies mostly in San Bernardino and Riverside Counties; however, a small part of Los Angeles County is also included. The area of Los Angeles County, which lays in the MSAR WMA, includes portions of the Cities of Pomona and Claremont (Figure B-7). The MSAR WMA is comprised of three subwatersheds. The subwatershed that includes portions of Pomona and Claremont is the Chino Basin Subwatershed. Surface drainage from Pomona and Claremont is generally southward toward San Antonio Creek, which is tributary to Chino Creek, which feeds into the Prado Flood Control Basin.

Various reaches of the MSAR WMA, including Chino Creek, are listed on 2010 CWA Section 303(d) List for bacteria. Elevated bacterial indicator densities are causing impairments of the REC-1 and REC-2 designated beneficial for the Santa Ana River Reach 3; Chino Creek Reaches 1 and 2; Mill Creek (Prado Area); Cucamonga Creek Reach 1; and Prado Park Lake.

The Santa Ana Water Board adopted TMDLs for bacteria for the Middle Santa Ana River Watershed. The Basin Plan amendment incorporating the Middle Santa Ana River Watershed Bacterial Indicator TMDLs was approved by the Santa Ana Water Board on August 26, 2005 (Resolution No. R8-2005-0001), by the State Water Board on May 15, 2006, by the Office of Administrative Law on September 1, 2006, and by the USEPA on May 16, 2007. The TMDL was effective on May 16, 2007. The Santa Ana Water Board concluded based upon data and information collected in 1993, 1996-1998 and in 2002-2004, that urban runoff from the MS4 is a significant source of bacterial indicators year round to the Middle Santa Ana River and its tributaries (Rice, 2005). The TMDL specifies both dry weather and wet weather WLAs, with distinct implementation schedules. Compliance with the summer dry (April 1st through October 31st) WLAs is to be achieved as soon as possible, but no later than December 31, 2015. In recognition of the difficulties associated with the control of storm water discharges, compliance with the winter wet (November 1st through March 31st) WLAs is to be achieved as soon as possible, but no later than December 31, 2025. The MS4 permit allows for discharges from the MS4s of the Cities of Claremont and Pomona to be regulated to ensure compliance with the wasteload allocations set forth in the Middle Santa Ana Bacterial Indicator TMDL by the terms of an NPDES permit issued by the Santa Ana Regional Water Quality Control Board that is applicable to such MS4 discharges. The NPDES permit must be issued pursuant to a designation agreement between the Los Angeles and Santa Ana Regional Boards under Water Code § 13228. In the absence of such an NPDES permit, the MS4 permit includes specific provisions in Attachment R that are consistent with the assumptions and requirements of the wasteload allocations applicable to MS4 discharges as set forth in the Middle Santa Ana Bacterial Indicator TMDL.

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Calleguas Creek Watershed Management Area. Calleguas Creek and its tributaries drain a watershed area of 343 square miles (sq. miles) in southern Ventura County and a small portion of western Los Angeles County. Approximately, 4.16 sq. miles of Los Angeles County is part of the Calleguas Creek Watershed. The land use of the 4.15 sq. miles is open space and recreation. The land use of the remaining 0.01 sq. miles is divided between low density residential, industrial, and agriculture (Southern California Association of Governments, 2008). Six TMDLs have been adopted and are in effect for the Calleguas Creek Watershed. None of the TMDLs assign waste load allocations to the Los Angeles County Flood Control District, County of Los Angeles or any incorporated city within Los Angeles County. Therefore, no water quality based effluent limitations were incorporated in this Order for TMDLs in the Calleguas Creek Watershed.

Manner of Incorporation of TMDL WLAs. The description of the permit conditions and the basis for the manner for incorporating requirements to implement the TMDLs' WLAs is discussed below.

WLAs may be expressed in different ways in a TMDL. In general, a WLA is expressed as a discharge condition that must be achieved in order to ensure that water quality standards are attained in the receiving water. The discharge condition may be expressed in terms of mass or concentration of a pollutant. However, in some cases, a WLA may be expressed as a receiving water condition such as an allowable number of exceedance days of the bacteria objectives.

In this Order, in most cases, TMDL WLAs have been translated into numeric WQBELs and, where consistent with the expression of the WLA in the TMDL, also as receiving water limitations. For each TMDL included in this Order, the WLA were translated into numeric WQBELs, which were based on the WLAs in terms of the numeric value and averaging period. For those TMDLs where the averaging period was not specific for the WLA, the averaging period was based on the averaging period for the numeric target.

For the bacteria TMDLs, where the WLA are expressed as an allowable number of exceedance days in the water body, the WLAs were translated into receiving water limitations. In addition to the receiving water limitations, WQBELs were established based on the bacteria water quality objectives. In the bacteria TMDLs, the numeric targets are based on the multi-part bacteriological water quality objectives; therefore, this approach is consistent with the assumptions of the bacteria TMDLs.

In the Ballona Creek Trash TMDL, the default baseline WLA for the MS4 Permittees is equal to 640 gallons (86 cubic feet) of uncompressed trash per square mile per year. No differentiation is applied for different land uses in the default baseline WLA. The default baseline WLAs for the Permittees has been refined based on results from the baseline monitoring conducted by the City of Los Angeles. The City of Los Angeles provided trash generation flux data for five land uses: commercial, industrial, high density residential, low density residential and open space and recreation. The Baseline WLA for any single city is the sum of the products of each land use area multiplied by the WLA for the land use area, as shown below:

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WLA = \sum for each city (area by land uses x allocations for this land use)

The baseline was calculated using the City of Los Angeles trash generation flux data provided for the 2003-04 and 2004-05 storm years averaged for pounds of trash per acre and the 2003-04 storm year for gallons of trash per acre. The urban portion of the Ballona Creek watershed was divided into twelve types of land uses for every city and unincorporated area in the watershed. The land use categories are: (1) high density residential, (2) low density residential, (3) commercial and services, (4) industrial, (5) public facilities, (6) educational institutions, (7) military installations, (8) transportation, (9) mixed urban, (10) open space and recreation, (11) agriculture, and (12) water. The land use data used in the calculation is based on the Southern California Association of Governments 2005 data.

1. Compliance Determination

For TMDLs that establish individual mass-based WLAs or a concentration-based WLA such as the Trash TMDLs, Nitrogen TMDLs, and Chloride TMDL, this Order requires Permittees to demonstrate compliance with their assigned WQBELs individually.

A number of the TMDLs for Bacteria, Metals and Toxics establish WLAs that are assigned jointly to a group of Permittees whose storm water and/or non-storm water discharges are or may be commingled in the MS4 prior to discharge to the receiving water subject to the TMDL. TMDLs address commingled MS4 discharges by assigning a WLA to a group of MS4 Permittees based on co-location within the same subwatershed. Permittees with co-mingled storm water are jointly responsible for meeting the WQBELs and receiving water limitations assigned to MS4 discharges in this Order. "Joint responsibility" means that the Permittees that have commingled MS4 discharges are responsible for implementing programs in their respective jurisdictions, or within the MS4 for which they are an owner or operator, to meet the WQBELs and/or receiving water limitations assigned to such commingled MS4 discharges.

In these cases, federal regulations state that co-permittees need only comply with permit conditions relating to discharges from the MS4 for which they are owners or operators. (40 CFR § 122.26(a)(3)(vi).) Individual co-permittees are only responsible for their contributions to the commingled discharge. This Order does not require a Permittee to individually ensure that a commingled MS4 discharge meets the applicable WQBELs included in this Order, unless such Permittee is shown to be solely responsible for the exceedances.

Additionally, this Order allows a Permittee to clarify and distinguish their individual contributions and demonstrate that its MS4 discharge did not cause or contribute to exceedances of applicable WQBELs and/or receiving water limitations. In this case, though the Permittee's discharge may commingle with that of other Permittees, the Permittee would not be held jointly responsible for the exceedance of the WQBELs or receiving water limitation.

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Individual co-permittees who demonstrate compliance with the WQBELs will not be held responsible for violations by non-compliant co-permittees.

Demonstrating Compliance with Interim Limitations. This Order provides Permittees with several means of demonstrating compliance with applicable interim WQBELs and/or interim receiving water limitations for the pollutant(s) associated with a specific TMDL. These include any of the following:

- a. There are no violations of the interim WQBELs for the pollutant(s) associated with a specific TMDL at the Permittee’s applicable MS4 outfall(s),¹ including an outfall to the receiving water that collects discharges from multiple Permittees’ jurisdictions;
- b. There are no exceedances of the applicable receiving water limitation for the pollutant(s) associated with a specific TMDL in the receiving water(s) at, or downstream of, the Permittee’s outfall(s);
- c. There is no direct or indirect discharge from the Permittee’s MS4 to the receiving water during the time period subject to the WQBEL and/or receiving water limitation for the pollutant(s) associated with a specific TMDL; or
- d. The Permittee has submitted and is fully implementing an approved Watershed Management Program, which includes analyses that provide the Regional Water Board with reasonable assurance that the watershed control measures proposed will achieve the applicable WQBELs and receiving water limitations consistent with relevant compliance schedules.

Demonstrating Compliance with Final Limitations. This Order provides Permittees with three general means of demonstrating compliance with an applicable *final* WQBEL and/or *final* receiving water limitation for the pollutant(s) associated with a specific TMDL.

These include any of the following:

- a. There are no violations of the final WQBEL for the specific pollutant at the Permittee’s applicable MS4 outfall(s)²;
- b. There are no exceedances of applicable receiving water limitation for the specific pollutant in the receiving water(s) at, or downstream of, the Permittee’s outfall(s); or
- c. There is no direct or indirect discharge from the Permittee’s MS4 to the receiving water during the time period subject to the WQBEL and/or receiving water limitation for the pollutant(s) associated with a specific TMDL.

¹ An outfall may include a manhole or other point of access to the MS4 at the Permittee’s jurisdictional boundary.
² Ibid.

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This Order provides the opportunity for Permittees to demonstrate compliance with *interim* effluent limitations through development and implementation of a Watershed Management Program, where Permittees have provided a reasonable demonstration through quantitative analysis (i.e., modeling or other approach) that the control measures/BMPs to be implemented will achieve the interim effluent limitations in accordance with the schedule provided in this Order. It is premature to consider application of this action based compliance demonstration option to the final effluent limitations and final receiving water limitations that have deadlines outside the term of this Order. More data is needed to validate assumptions and model results regarding the linkage among BMP implementation, the quality of MS4 discharges, and receiving water quality.

During the term of this Order, there are very few deadlines for compliance with final effluent limitations applicable to storm water, or final receiving water limitations applicable during wet weather conditions. Most deadlines during the term of this Order are for interim effluent limitations applicable to storm water, or for final effluent limitations applicable to non-storm water discharges and final dry weather receiving water limitations.

There are only five State-adopted TMDLs for which the compliance deadlines for final water quality-based effluent limitations applicable to storm water occur during the term of this Order. These include: Santa Clara River Chloride TMDL, Santa Clara River Nitrogen TMDL, Los Angeles River Nitrogen TMDL, Marina del Rey Harbor Toxics TMDL, and LA Harbor Bacteria TMDL. In most of these five TMDLs, compliance with the final water quality-based effluent limitations assigned to MS4 discharges is expected to be achieved (e.g., Santa Clara River Chloride TMDL³), or a mechanism is in place to potentially allow additional time to come into compliance (e.g. reconsideration of the Marina del Rey Harbor Toxics TMDL implementation schedule).

The Regional Water Board will evaluate the effectiveness of this action-based compliance determination approach in ensuring that interim effluent limitations for storm water are achieved during this permit term. If this approach is effective in achieving compliance with interim effluent limitations for storm water during this permit term, the Regional Water Board will consider during the next permit cycle whether it would be appropriate to allow a similar approach for demonstrating compliance with final water quality-based effluent limitations applicable to storm water. The Order includes a specific provision to support reopening the permit to include provisions or modifications to WQBELs in Part VI.E and Attachments L-R in this Order prior to the final compliance deadlines, if practicable, that would allow an action-based, BMP compliance demonstration approach with regard to final WQBELs for storm water discharges based on the Regional Board's review of relevant research, including but not limited to data and information provided by Permittees, on storm water quality and control technologies

³ Data from land use monitoring conducted under the LA County MS4 Permit from 1994-99 indicate chloride concentrations ranging from 3.2-48 mg/L, while more recent data from the mass emissions station in the Santa Clara River (S29) indicate concentrations ranging from 116-126 mg/l in dry weather, and 25.1-96.3 mg/l in wet weather, suggesting that storm water has a diluting effect on chloride concentrations in the receiving water.

2. Compliance Schedules for Achieving TMDL Requirements

A Regional Water Board may include a compliance schedule in an NPDES permit when the state's water quality standards or regulations include a provision that authorizes such schedules in NPDES permits.⁴ In California, TMDL implementation plans⁵ are typically adopted through Basin Plan Amendments. The TMDL implementation plan, which is part of the Basin Plan Amendment, becomes a regulation upon approval by the State of California Office of Administrative Law (OAL).⁶ Pursuant to California Water Code sections 13240 and 13242, TMDL implementation plans adopted by the Regional Water Board "shall include ... a time schedule for the actions to be taken [for achieving water quality objectives]," which allows for compliance schedules in future permits. This Basin Plan Amendment becomes the applicable regulation that authorizes an MS4 permit to include a compliance schedule to achieve effluent limitations derived from wasteload allocations.

Where a TMDL implementation schedule has been established through a Basin Plan Amendment, it is hereby incorporated into this Order as a compliance schedule to achieve interim and final WQBELs and corresponding receiving water limitations, in accordance with 40 CFR section 122.47. WQBELs must be consistent with the assumptions and requirements of any WLA, which includes applicable implementation schedules.⁷ California Water Code sections 13263 and 13377 state that waste discharge requirements must implement the Basin Plan.⁸ Therefore, compliance schedules for attaining WQBELs derived from WLAs must be based on a state-adopted TMDL implementation plan and cannot exceed the maximum time that the implementation plan allows.

In determining the compliance schedules, the Regional Water Board considered numerous factors to ensure that the schedules are as short as possible. Factors examined include, but are not limited to, the size and complexity of the watershed; the pollutants being addressed; the number of responsible agencies involved; time for Co-Permittees to negotiate memorandum of agreements; development of water quality management plans; identification of funding sources; determination of an implementation strategy based on the recommendations of water quality management plans and/or special studies; and time for the implementation

⁴ See *In re Star-Kist Caribe, Inc.*, (Apr. 16, 1990) 3 E.A.D. 172, 175, modification denied, 4 E.A.D. 33, 34 (EAB 1992)).

⁵ TMDL implementation plans consist of those measures, along with a schedule for their implementation, that the Water Boards determine are necessary to correct an impairment. The NPDES implementation measures are thus required by sections 303(d) and 402(p)(3)(B)(iii) of the CWA. State law also requires the Water Boards to implement basin plan requirements. (See Wat. Code §§ 13263, 13377; *State Water Resources Control Board Cases* (2006) 136 Cal.App.4th 189.)

⁶ See Gov. Code, § 11353, subd. (b). Every amendment to a Basin Plan, such as a TMDL and its implementation plan, requires approval by the State Water Board and OAL. When the TMDL and implementation plan is approved by OAL, it becomes a state regulation.

⁷ See 40 C.F.R. § 122.44(d)(1)(vii)(B).

⁸ Cal. Wat. Code, § 13263, subd. (a) ("requirements shall implement any relevant water quality control plans that have been adopted"); Cal. Wat. Code, § 13377 ("the state board or the regional boards shall . . . issue waste discharge requirements and dredged or fill material permits which apply and ensure compliance with all applicable provisions of the [CWA], thereto, together with any more stringent effluent standards or limitations necessary to implement waste quality control plans, or for the protection of beneficial uses, or to prevent nuisance"); see also, *State Water Resources Control Board Cases* (2006) 136 Cal.App.4th 189.

strategies to yield measurable results. Compliance schedules may be altered based on the monitoring and reporting results as set forth in the individual TMDLs.

In many ways, the incorporation of interim and final WQBELs and associated compliance schedules is consistent with the iterative process of implementing BMPs that has been employed in the previous Los Angeles County MS4 Permits in that progress toward compliance with the final effluent limitations may occur over the course of many years. However, because the waterbodies in Los Angeles County are impaired due to MS4 discharges, it is necessary to establish more specific provisions in order to: (i) ensure measurable reductions in pollutant discharges from the MS4, resulting in progressive water quality improvements during the iterative process, and (ii) establish a final date for completing implementation of BMPs and, ultimately, achieving effluent limitations and water quality standards.

The compliance schedules established ~~herein~~ in this Order are consistent with the implementation plans established in the individual TMDLs. The compliance dates for meeting the final WQBELs and receiving water limitations for each TMDL are listed below in Table F-7.

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Table F-7. Compliance Schedule for final compliance dates.

	Final Compliance date has Passed	Final Compliance date within 5 years (2012-2017)	Final Compliance date between 5 and 10 years (2018-2022)	Final Compliance date after 10 years (2023)
TOTAL MAXIMUM DAILY LOADS (TMDL)				
Santa Clara River Nitrogen Compounds TMDL	March 23, 2004			
Upper Santa Clara River Chloride TMDL	April 6, 2010			
Lake Elizabeth, Munz Lake, and Lake Hughes Trash TMDL (Lake Elizabeth only)		March 6, 2016		
Santa Clara River Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL				
Dry Weather				March 21, 2023
Wet Weather				March 21, 2029
Santa Monica Bay Beaches Bacteria TMDL				
Summer Dry Weather	July 15, 2006			
Winter Dry Weather	July 15, 2009			
Wet Weather			July 15, 2021	
Santa Monica Bay Nearshore and Offshore Debris TMDL			March 20, 2020	
Santa Monica Bay TMDL for DDTs and PCBs (USEPA established)		March 26, 2012		
Malibu Creek and Lagoon Bacteria TMDL				
Summer Dry Weather	January 24, 2009			
Winter Dry Weather	January 24, 2012			
Wet Weather			July 15, 2021	
Malibu Creek Watershed Trash TMDL		July 7, 2017		
Malibu Creek Watershed Nutrients TMDL (USEPA established)	March 21, 2003			
Ballona Creek Trash TMDL		September 30, 2015		
Ballona Creek Estuary Toxic Pollutants TMDL			January 11, 2021	
Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL				
Dry Weather		April 27, 2013		
Wet Weather			July 15, 2021	

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	Final Compliance date has Passed	Final Compliance date within 5 years (2012-2017)	Final Compliance date between 5 and 10 years (2018-2022)	Final Compliance date after 10 years (2023)
TOTAL MAXIMUM DAILY LOADS (TMDL)				
Ballona Creek Metals TMDL				
Dry Weather		January 11, 2016		
Wet Weather			January 11, 2021	
Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation (USEPA established)		March 26, 2012		
Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL				
Dry Weather	March 18, 2007			
Wet Weather			July 15, 2021	
Marina del Rey Harbor Toxic Pollutants TMDL		March 22, 2016	March 22, 2021*	
Los Angeles Harbor Bacteria TMDL	March 10, 2010			
Machado Lake Trash TMDL		March 6, 2016		
Machado Lake Nutrient TMDL			September 11, 2018	
Machado Lake Pesticides and PCBs TMDL			September 30, 2019	
Dominguez Channel and Greater LA and LB Harbor Waters Toxic Pollutants TMDL				March 23, 2032
Los Angeles River Watershed Trash TMDL		September 30, 2016		
Los Angeles River Nitrogen Compounds and Related Effects TMDL	March 23, 2004			
Los Angeles River and Tributaries Metals TMDL				
Dry Weather				January 11, 2024
Wet Weather				January 11, 2028
Los Angeles River Watershed Bacteria TMDL				
Dry Weather (Compliance dates range from 10 to 25 years)			March 23, 2022	March 23, 2037
Wet Weather				March 23, 2037
Legg Lake Trash TMDL	-	March 6, 2016	-	-
Long Beach City Beaches and Los Angeles River Estuary Bacteria		March 26, 2012		

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TOTAL MAXIMUM DAILY LOADS (TMDL)	Final Compliance date has Passed	Final Compliance date within 5 years (2012-2017)	Final Compliance date between 5 and 10 years (2018-2022)	Final Compliance date after 10 years (2023)
TMDL (USEPA established)				
Los Angeles Area Lakes TMDLs (USEPA established)		March 26, 2012		
San Gabriel River and Impaired Tributaries Metals and Selenium TMDL (USEPA established)	March 26, 2007			
Legg Lake Trash TMDL	-	March 6, 2016	-	-
Los Cerritos Channel Metals TMDL (USEPA established)	March 17, 2010			
Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL			July 28, 2018	
Middle Santa Ana River Watershed Bacterial Indicator TMDLs	-	-	-	-
<u>Dry Weather</u>	-	<u>December 31, 2015</u>	-	-
<u>Wet Weather</u>		-		<u>December 31, 2025</u>

* If an Integrated Water Resources Approach is approved and implemented then Permittees have an extended compliance deadline.

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3. State Adopted TMDLs with Past Final Compliance Deadlines

~~As required by~~ In accordance with federal regulations, this Order includes WQBELs necessary to achieve applicable wasteload allocations assigned to MS4 discharges. In some cases, the deadline specified in the TMDL implementation plan for achieving the final wasteload allocation has passed. (See Table F-8) This Order requires that Permittees comply immediately with WQBELs and/or receiving water limitations for which final compliance deadlines have passed.

Table F-8. State-Adopted TMDLs with Past Final Implementation Deadlines

TOTAL MAXIMUM DAILY LOADS (TMDL)	Final Compliance date has Passed
Santa Clara River Nitrogen Compounds TMDL	March 23, 2004
Upper Santa Clara River Chloride TMDL	April 6, 2010
Santa Monica Bay Beaches Bacteria TMDL <i>Summer Dry Weather only</i>	July 15, 2006
Santa Monica Bay Beaches Bacteria TMDL <i>Winter Dry Weather only</i>	July 15, 2009
Malibu Creek and Lagoon Bacteria TMDL <i>Summer Dry Weather only</i>	January 24, 2009
Malibu Creek and Lagoon Bacteria TMDL <i>Winter Dry Weather only</i>	January 24, 2012
Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL <i>Dry Weather Year-round only</i>	March 18, 2007
Los Angeles Harbor Bacteria TMDL	March 10, 2010
Los Angeles River Nitrogen Compounds and Related Effects TMDL	March 23, 2004

Where a Permittee determines that its MS4 discharge may not meet the final WQBELs for the TMDLs in Table F-8 upon adoption of this Order, the Permittee may request a time schedule order (TSO) from the Regional Water Board. TSOs are issued pursuant to California Water Code section 13300, whenever a Water Board "finds that a discharge of waste is taking place or threatening to take place that violates or will violate [Regional Water Board] requirements." Permittees may individually request a TSO, or may jointly request a TSO with all Permittees subject to the WQBELs and/or receiving water limitations. Permittees must request a TSO to achieve WQBELs for the TMDLs in Table F-8 no later than 45 days after the date this Order is adopted.

In the request, the Permittee(s) must include, at a minimum, the following:

- a. Location specific data demonstrating the current quality of the MS4 discharge(s) in terms of concentration and/or load of the target pollutant(s) to the receiving waters subject to the TMDL;
- b. A detailed description and chronology of structural controls and source control efforts, including location(s) of implementation, since the effective date of the TMDL, to reduce the pollutant load in the MS4 discharges to the receiving waters subject to the TMDL;
- c. A list of discharge locations for which additional time is needed to achieve the water quality based effluent limitations and/or receiving water limitations;
- d. Justification of the need for additional time to achieve the water quality-based effluent limitations and/or receiving water limitations for each location identified in Part VI.E.3.c, above;

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- e. A detailed time schedule of specific actions the Permittee will take in order to achieve the water quality-based effluent limitations and/or receiving water limitations at each location identified in Part VI.E.3.c, above;
- f. A demonstration that the time schedule requested is as short as possible, consistent with California Water Code section 13385(j)(3)(C)(i), taking into account the technological, operation, and economic factors that affect the design, development, and implementation of the control measures that are necessary to comply with the effluent limitation(s); and
- g. If the requested time schedule exceeds one year, the proposed schedule shall include interim requirements and the date(s) for their achievement. The interim requirements shall include both of the following:
 - i. Effluent limitation(s) for the pollutant(s) of concern; and
 - ii. Actions and milestones leading to compliance with the effluent limitation(s).

The Regional Water Board does not intend to take enforcement action against a Permittee for violations of specific WQBELs and corresponding receiving water limitations for which the final compliance deadline has passed if a Permittee is fully complying with the requirements of a TSO to resolve exceedances of the WQBELs for the specific pollutant(s) in the MS4 discharge.

4. USEPA Established TMDLs

USEPA has established seven TMDLs that include wasteload allocations for MS4 discharges covered by this Order (See Table F-9). Five TMDLs were established since 2010, one in 2007, and one in 2003.

Table F-9. USEPA Established TMDLs with WLAs Assigned to MS4 Discharges

TOTAL MAXIMUM DAILY LOADS (TMDL)	Effective Date
Santa Monica Bay TMDL for DDTs and PCBs (USEPA established)	March 26, 2012
Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation (USEPA established)	March 26, 2012
Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL (USEPA established)	March 26, 2012
Los Angeles Area Lakes TMDLs (USEPA established)	March 26, 2012
Los Cerritos Channel Metals TMDL (USEPA established)	March 17, 2010
San Gabriel River and Impaired Tributaries Metals and Selenium TMDL (USEPA established)	March 26, 2007
Malibu Creek Watershed Nutrients TMDL (USEPA established)	March 21, 2003

In contrast to State-adopted TMDLs, USEPA established TMDLs do not contain an implementation plan or schedule. The Clean Water Act does not allow USEPA to either adopt implementation plans or establish compliance schedules for TMDLs that it establishes. Such decisions are generally left with the States. The Regional Water Board could either (1) adopt a separate implementation plan as a Basin Plan Amendment for each USEPA established TMDL, which would allow inclusion of compliance schedules in the permit where applicable, or (2) issue a Permittee a schedule leading to full compliance in a separate enforcement order (such as a Time

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Schedule Order or a Cease and Desist Order). To date, the Board has not adopted a separate implementation plan or enforcement order for any of these TMDLs. As such, the final WLAs in the seven USEPA established TMDLs identified above become effective immediately upon establishment by USEPA and placement in a NPDES permit.

The Regional Water Board's decision as to how to express permit conditions for USEPA established TMDLs is based on an analysis of several specific facts and circumstances surrounding these TMDLs and their incorporation into this Order. First, since these TMDLs do not include implementation plans, none of these TMDLs have undergone a comprehensive evaluation of implementation strategies or an evaluation of the time required to fully implement control measures to achieve the final WLAs. Second, given the lack of an evaluation, the Regional Water Board is not able to adequately assess whether Permittees will be able to immediately comply with the WLAs at this time. Third, the majority of these TMDLs were established by USEPA recently (i.e., since 2010) and permittees have had limited time to plan for and implement control measures to achieve compliance with the WLAs. Lastly, while federal regulations do not allow USEPA to establish implementation plans and schedules for achieving these WLAs, USEPA has nevertheless included implementation recommendations regarding MS4 discharges as part of six of the seven of these TMDLs. The Regional Water Board needs time to adequately evaluate USEPA's recommendations. For the reasons above, the Regional Water Board has determined that numeric water quality based effluent limitations for these USEPA established TMDLs are infeasible at the present time. The Regional Water Board may at its discretion revisit this decision within the term of the Order or in a future permit, as more information is developed to support the inclusion of numeric water quality based effluent limitations.

In lieu of inclusion of numeric water quality based effluent limitations at this time, this Order requires Permittees subject to WLAs in USEPA established TMDLs to propose and implement best management practices (BMPs) that will be effective in achieving the numeric WLAs. Permittees will propose these BMPs to the Regional Water Board in a Watershed Management Program Plan, which is subject to Regional Water Board Executive Officer approval. As part of this Plan, Permittees are also required to propose a schedule for implementing the BMPs that is as short as possible. The Regional Water Board finds that, at this time, it is reasonable to include permit conditions that require Permittees to develop specific Watershed Management Program plans that include interim milestones and schedules for actions to achieve the WLAs. These plans will facilitate a comprehensive planning process, including coordination among co-permittees where necessary, on a watershed basis to identify the most effective watershed control measures and implementation strategies to achieve the WLAs.

At a minimum, the Watershed Management Program Plan must include the following data and information relevant to the USEPA established TMDL:

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- i. Available data demonstrating the current quality of the MS4 discharge(s) in terms of concentration and/or load of the target pollutant(s) to the receiving waters subject to the TMDL;
- ii. A detailed time schedule of specific actions the Permittee will take in order to achieve the WLA(s);
- iii. A demonstration that the time schedule requested is as short as possible, taking into account the time since USEPA establishment of the TMDL, and technological, operation, and economic factors that affect the design, development, and implementation of the control measures that are necessary to comply with the WLA(s);
 - a. For the Malibu Creek Nutrient TMDL established by USEPA in 2003, in no case shall the time schedule to achieve the final numeric WLAs exceed five years from the effective date of this Order; and
- iv. If the requested time schedule exceeds one year, the proposed schedule shall include interim requirements, including numeric milestones, and the date(s) for their achievement.

Each Permittee subject to a WLA in a TMDL established by USEPA since 2010 must submit a draft of a Watershed Management Program Plan to the Regional Water Board Executive Officer for approval no later than one year after the effective date of this Order.

Each Permittee subject to a WLA in a TMDL established by USEPA prior to 2010 must submit a draft of a Watershed Management Program Plan to the Regional Water Board Executive Officer for approval no later than six months after the effective date of this Order..

Based on the nature and timing of the proposed watershed control measures, the Regional Water Board will consider appropriate actions on its part, which may include: (1) no action and continued reliance on permit conditions that require implementation of the approved watershed control measures throughout the permit term; (2) adopting an implementation plan and corresponding schedule through the Basin Plan Amendment process and then incorporating water quality based effluent limitations and a compliance schedule into this Order consistent with the State-adopted implementation plan; or (3) issuing a time schedule order to provide the necessary time to fully implement the watershed control measures to achieve the WLAs.

If a Permittee chooses not to submit a Watershed Management Program Plan, or the plan is determined to be inadequate by the Regional Water Board Executive Officer and necessary revisions are not made within 90 days of written notification to the Permittee that that plan is inadequate, the Permittee will be required to demonstrate compliance with the numeric WLAs immediately based on monitoring data collected under the MRP (Attachment E) for this Order.

The Regional Water Board does not intend to take enforcement action against a Permittee for violations of specific WLAs and corresponding receiving water limitations for USEPA established TMDLs if a Permittee has developed and is

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implementing an approved Watershed Management Program to achieve the WLAs in the USEPA TMDL and the associated receiving water limitations.

E. Other Provisions

1. Legal Authority

Adequate legal authority is required to implement and enforce most parts of the Minimum Control Measures and all equivalent actions if implemented with a Watershed Management Program (See 40 CFR section 122.26(d)(2)(i)(A)-(through F) and 40 CFR section 122.26(d)(2)(iv). Without adequate legal authority the MS4 would be unable to perform many vital functions such as performing inspections, requiring remedies, and requiring installation of control measures. In addition, the Permittee would not be able to penalize and/or attain remediation costs from violators.

2. Fiscal Resources

The annual fiscal analysis will show the allocated resources, expenditures, and staff resources necessary to comply with the permit, and implement and enforce the Permittee's Watershed Management Program (See 40 CFR section 122.26(d)(2)(vi). The annual analysis is necessary to show that the Permittee has adequate resources to meet all Permit Requirements. The analysis can also show year-to-year changes in funding for the storm water program. A summary of the annual analysis must be reported in the annual report. This report will help the Permitting Authority understand the resources that are dedicated to compliance with this permit, and to implementation and enforcement of the Watershed Management Program, and track how this changes over time. Furthermore, the inclusion of the requirement to perform a fiscal analysis annually is similar to requirements included in Order No. 01-182 permit as well as the current Ventura County MS4 permit.

3. Responsibilities of the Permittees

Because of the complexity and networking of the storm drain system and drainage facilities within and tributary to the LA MS4, the Regional Water Board adopted an area-wide approach in permitting storm water and urban runoff discharges. Order No. 01-182 was structured as a single permit whereby individual Permittees were assigned uniform requirements and additional requirements were assigned to the Principal Permittee (Los Angeles County Flood Control District). ~~Because the Los Angeles County Flood Control District does not own or control land where most pollutants originate, it is relieved as Principal Permittee.~~ This permit does not designate a principal Permittee and as such requires each Permittee to implement provisions as a separate entity. Furthermore it does not hold a Permittee responsible for implementation of provisions applicable to other Permittees.

Part VI.A.4.a requires inter and intra-agency coordination to facilitate implementation of this Order. This requirement is based on 40 CFR section 122.26(d)(2)(iv) which requires "a comprehensive planning process which public participation and where

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necessary intergovernmental coordination, to reduce the discharge of pollutants to the maximum extent practicable [...].”

4. Reopener and Modification Provisions

These provisions are based on 40 CFR sections 122.44, 122.62, 122.63, 122.64, 124.5, 125.62, and 125.64, and are also consistent with Order No. 01-182. The Regional Water Board may reopen the permit to modify permit conditions and requirements, as well as revoke, reissue, or terminate in accordance with federal regulations. Causes for such actions include, but are not limited to, endangerment to human health or the environment; acquisition of newly-obtained information that would have justified the application of different conditions if known at the time of Order adoption; to incorporate provisions as a result of new federal or state laws, regulations, plans, or policies (including TMDLs and other Basin Plan amendments); modification in toxicity requirements; violation of any term or condition in this Order; and/or minor modifications to correct typographical errors or require more frequent monitoring or reporting by a Permittee. The Order also includes additional causes including: within 18 months of the effective date of a revised TMDL or as soon as practicable thereafter, where the revisions warrant a change to the provisions of this Order, the Regional Water Board may modify this Order consistent with the assumptions and requirements of the revised WLA(s), including the program of implementation; in consideration of any State Water Board action regarding the precedential language of State Water Board Order WQ 99-05; and to include provisions or modifications to WQBELs in Part VI.E and Attachments L-R in this Order prior to the final compliance deadlines, if practicable, that would allow an action-based, BMP compliance demonstration approach with regard to final WQBELs for storm water discharges based on the Regional Board’s review of relevant research, including but not limited to data and information provided by Permittees, on storm water quality and control technologies.

XIII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 308(a) of the federal Clean Water Act, and s40 CFR sections 122.41(h), (j)-(l), 122.44(i), and 122.48 of Title 40 of the Code of Federal Regulations requires that all NPDES permits specify monitoring and reporting requirements for recording and reporting monitoring results. Federal regulations applicable to large and medium MS4s also specify additional monitoring and reporting requirements. (40 C.F.R. §§ 122.26(d)(2)(i)(F) & (d)(2)(iii)(D), 122.42(c).) -California Water Code sections 13267 and 13383 further authorizes the Regional Water Board to establish require technical and monitoring, inspection, entry, -reportings, and recordkeeping requirements. The MRP (Attachment E of this Order) establishes monitoring, -and-reporting, and recordkeeping requirements thatto implement the federal and state laws and/or regulationsrequirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this Order.

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A. Integrated Monitoring Plans

1. Integrated Monitoring Program and Coordinated Integrated Monitoring Program

As discussed in Part VI.B of this Fact Sheet, the purpose of the Watershed Management Programs is to provide a framework for Permittees to implement the requirements of this Order in an integrated and collaborative fashion and to address water quality priorities on a watershed scale. Additionally, the Watershed Management Programs are to be designed to ensure that discharges from the Los Angeles County MS4: (i) achieve applicable water quality based effluent limitations that implement TMDLs, (ii) do not cause or contribute to exceedances of receiving water limitations, and (iii) for non-storm water discharges from the MS4, are not a source of pollutants to receiving waters. This Order allows Permittees in coordination with an approved Watershed Management Program per Part VI.C, to implement a customized monitoring program that achieves the five Primary Objectives set forth in Part II.A. of Attachment E and includes the elements set forth in Part II.E. of Attachment E. This Order provides options for each Permittee to develop and implement an Integrated Monitoring Program (IMP), or alternatively, individual Permittee(s) may cooperate with other Permittees to develop a Coordinated Integrated Monitoring Program (CIMP). Both the IMP and CIMP are intended to facilitate the effective and collaborative monitoring of receiving waters, storm water, and non-storm water discharges and to report the results of monitoring to the Regional Water Board.

The key requirements for Watershed Management Programs are included in Part VI.C of this Order. The IMP and CIMP requirements within the MRP largely summarize the requirements and reinforce that, at a minimum, the IMP or CIMP must address all TMDL and Non-TMDL monitoring requirements of this Order, including receiving water monitoring, storm water outfall based monitoring, non-storm water outfall based monitoring, and regional water monitoring studies.

Both the IMP and CIMP approach provides opportunities to increase the cost efficiency and effectiveness of the Permittees monitoring program as monitoring can be designed, prioritized and implemented on a watershed basis. The IMP/CIMP approach allows the Permittees to prioritize monitoring resources between watersheds based on TMDL Implementation and Monitoring Plan schedules, coordinate outfall based monitoring programs and implement regional studies. Cost savings can also occur when Permittees coordinate their monitoring programs with other Permittees.

B. TMDL Monitoring Plans

Monitoring requirements established in TMDL Monitoring Plans, presented in Table E-1. Approved TMDL Monitoring Plans by Watershed Management Area, were approved by the Executive Officer of the Regional Water Board prior to the effective date of this Order are incorporated into this Order by reference.

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C. Receiving Water Monitoring

The purposes of receiving water monitoring are to measure the effects of storm water and non-storm water discharges from the MS4 to the receiving water, to identify water quality exceedances, to evaluate compliance with TMDL WLAs and receiving water limitations, and to evaluate whether water quality is improving, staying the same or declining.

1. Receiving Water Monitoring Stations

Receiving water monitoring is linked to outfall based monitoring in order to gauge the effects of MS4 discharges on receiving water. Receiving water monitoring stations must be downstream of linked outfall monitoring stations.

The IMP, CIMP or stand-alone receiving monitoring plan (in the case of jurisdictional monitoring) must include a map identifying proposed wet weather and dry-weather monitoring stations. Receiving water monitoring stations may include historical mass emission stations, TMDL compliance monitoring stations, or other selected stations. The Permittee must describe how monitoring at the proposed locations will accurately characterize the effects of the discharges from the MS4 on the receiving water, and meet other stated objectives. The plan must also state whether historical mass emission stations will continue to be monitored and describe the value of past receiving water monitoring data in performing trends analysis to assess whether water quality is improving, staying the same or declining.

2. Minimum Monitoring Requirements

Receiving water is to be monitored during both dry and wet weather conditions to assess the impact of non-storm water and storm water discharges. Wet weather and dry weather are defined in each watershed, consistent with the definitions in TMDLs approved within the watershed. Monitoring is to commence within 6 hours of the commencement of linked outfall monitoring. At a minimum, the parameters to be monitored and the monitoring frequency are the same as those required for the linked outfalls.

D. Outfall Based Monitoring

The MRP requires Permittees to conduct outfall monitoring, linked with receiving water monitoring, ~~a study of Pyrethroids and their effects in receiving waters and bioassessment monitoring and TMDL special studies~~. The MRP allows the Permittees flexibility to integrate the minimum requirements of this Order, applicable TMDL monitoring plans and other regional monitoring obligations into a single IMP or within a CIMP.

Per Part VII.A-2 of the ~~MRP is Order~~, the Permittee must establish a storm drain system map to aid in the development of the outfall monitoring plan and to assist the Regional Water Board in reviewing the logic and adequacy of the number and location of outfalls selected for monitoring. The map must include the storm drain network, receiving

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waters, other surface waters that may impact hydrology, including dams and dry weather diversions. In addition, the map must identify the location and identifying code for each major outfall within the Permittee’s jurisdiction. The map must include overlays including jurisdictional boundaries, subwatershed boundaries and storm drain outfall catchment boundaries. The map must distinguish between storm drain catchment drainage areas and subwatershed drainage areas, as these may differ. In addition, the map must include overlays displaying land use, impervious area and effective impervious area (if available). To the extent known, outfalls that convey significant non-stormwater discharges (see Part I.F to this Fact Sheet), must also be identified on the map, and the map must be updated annually to include the total list of known outfalls conveying significant flow of non-storm water discharge.

E. Storm Water Outfall Based Monitoring

The purpose of the outfall monitoring plan is to characterize the storm water discharges from each Permittee’s drainages within each subwatershed. Outfall based monitoring is also conducted to assess compliance with WQBELs. Under an IMP approach, each Permittee must identify at least one outfall within each subwatershed (HUC 12) within its jurisdictional boundary to monitor storm water discharges. The selected outfall(s) should receive drainage from an area representative of the land uses within the portion of its jurisdiction that drains to the subwatershed, and not be unduly influenced by storm water discharges from upstream jurisdictions or other NPDES discharges. It is assumed that storm water runoff quality will be similar for similar land use areas, and therefore runoff from a representative area will provide sufficient characterization of the entire drainage area. Factors that may impact storm water runoff quality include the land use (industrial, residential, commercial) and the control measures that are applied. Factors that may impact storm water runoff volume include percent effective impervious cover (connected to the storm drain system), vegetation type, soil compaction and soil permeability.

Storm water outfall monitoring is linked to receiving water monitoring (see above). Monitoring must be conducted at least three times per year during qualifying rain events, including the first rain event of the year and conducted approximately concurrently (within 6 hours) before the commencement of the downstream receiving water monitoring.

Monitoring is conducted for pollutants of concern including all pollutants with assigned WQBELs. Parameters to be monitored during wet weather include: flow, pollutants subject to a TMDL applicable to the receiving water, pollutants listed on the Clean Water Act Section 303(d) list for the receiving water or a downstream receiving water. Flow is necessary to calculate pollutant loading. Sampling requirements, including methods for collecting flow-weighted composite samples, are consistent with the Ventura County Monitoring program (Order No. C17388).

For water bodies listed on the Clean Water Act section 303(d) list as being impaired due to sedimentation, siltation or turbidity, total suspended solids (TSS) and suspended sediment concentration (SSC) must be analyzed. TSS is the parameter most often required in NPDES permits to measure suspended solids. However, studies conducted

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by the United States Geological Survey (USGS) have found that the TSS procedure may not capture the full range of sediment particle sizes contributing to sediment impairments . Therefore both TSS and SSC are required in this Order.

For freshwater, the following field measurements are also required: hardness, pH, dissolved oxygen, temperature, and specific conductivity. Hardness, pH and temperature are parameters impacting the effect of pollutants in freshwater (i.e., metals water quality standards are dependent on hardness, ammonia toxicity is dependent on pH and temperature. Temperature and dissolved oxygen are interdependent and fundamental to supporting aquatic life beneficial uses. Specific conductivity is a parameter important to assessing potential threats to MUN and freshwater aquatic life beneficial uses.

Aquatic toxicity monitoring is required in the receiving water twice per year during wet weather conditions. Aquatic toxicity is a direct measure of toxicity and integrates the effects of multiple synergistic effects of known and unidentified pollutants. When samples are found to be toxic, a Toxicity Identification Evaluation must be performed in an attempt to identify the pollutants causing toxicity. Aquatic toxicity is required to be monitored in the receiving water twice per year during wet-weather rather than three times per year due to the expense of the procedure.

The monitoring data is to be accompanied by rainfall data and hydrographs, and a narrative description of the storm event, consistent with the requirements in the Ventura County MS4 (Monitoring Program—No. CI 7388). This information will allow the Permittee and the Regional Water Board staff to evaluate the effects of differing storm events in terms of storm water runoff volume and duration and in-stream effects.

F. Non-Stormwater Outfall-Based Screening and Monitoring Program

The non-storm water outfall screening and monitoring program is intended to build off of Permittees prior efforts under Order No. 01-182 to screen all outfalls within their MS4 to identify illicit connections and discharges. Under this Order, the Permittees will use the following step-wise method to assess non-storm water discharges.

- Develop criteria or other means to ensure that all outfalls with significant non-storm water discharges are identified and assessed during the term of this Order.
- For outfalls determined to have significant non-storm water flow, determine whether flows are the result of illicit connections/illicit discharges (IC/IDs), authorized or conditionally exempt non-storm water flows, or from unknown sources.
- Refer information related to identified IC/IDs to the IC/ID Elimination Program (Part VI.D.9 of this Order) for appropriate action.
- Based on existing screening or monitoring data or other institutional knowledge, assess the impact of non-storm water discharges (other than identified IC/IDs) on the receiving water.
- Prioritize monitoring of outfalls considering the potential threat to the receiving water and applicable TMDL compliance schedules.

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- Conduct monitoring or assess existing monitoring data to determine the impact of non-storm water discharges on the receiving water.
- Conduct monitoring or other investigations to identify the source of pollutants in non-storm water discharges.
- Use results of the screening process to evaluate the conditionally exempt non-storm water discharges identified in Part III.A.2 and III.A.3 in this Order and take appropriate actions pursuant to Part III.A.4.d of this Order for those discharges that have been found to be a source of pollutants. Any future reclassification shall occur per the conditions in Parts III.A.2 or III.A.6 of this Order.

The screening and monitoring program is intended to maximize the use of Permittee resources by integrating the screening and monitoring process into existing or planned IMP/CIMP efforts. It is also intended to rely on the illicit discharge source investigation and elimination requirements in Part VI.D.9 of this Order and the MS4 Mapping requirements in Part VII.A of the MRP.

The screening and source identification component of the program is used to identify the source(s) and point(s) of origin of the non-storm water discharge. The Permittee is required to develop a source identification schedule based on the prioritized list of outfalls exhibiting significant non-storm water discharges. The schedule shall ensure that source investigations are to be conducted for no less than 25% of the outfalls in the inventory within three years of the effective date of this Order and 100% of the outfalls within 5 years of the effective date of this Order. This will ensure that all outfalls with significant non-storm water discharges will be assessed within the term of this Order.

Additional requirements have been included to require the Permittee to develop a map and database of all outfalls with known non-storm water discharges. The database and map are to be updated throughout the term of this Order. If the source of the non-storm water discharge is determined to be an NPDES permitted discharge, a discharge subject to a Record of Decision approved by USEPA pursuant to section 121 of CERCLA, a conditionally exempt essential non-storm water discharge, or entirely comprised of natural flows as defined at Part III.A.d of this Order, the Permittee need only document the source and report to the Regional Water Board within 30 days of determination and in the next annual report. Likewise, if the discharge is determined to originate in an upstream jurisdiction, the Permittee is to provide notice and all characterization data to the upstream jurisdiction within 30 days of determination.

However, if the source is either unknown or a conditionally exempt non-essential non-storm water discharge, each Permittee shall conduct monitoring required in Part IX.F of the MRP. Special provisions are also provided if the discharge is found to result from multiple sources.

The parameters to be monitored include flow rate, pollutants assigned a WQBEL or receiving water limitation to implement TMDL provisions for the respective receiving water, as identified in Attachments L - R of this Order, non-storm water action levels as identified in Attachment G of this Order, and CWA Section 303(d) listed pollutants for

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the respective receiving water. Aquatic Toxicity required only when receiving water monitoring indicates aquatic toxicity.

In an effort to provide flexibility and allow the Permittee to prioritize its monitoring efforts, the outfall based monitoring can be integrated within an IMP/CIMP. For outfalls subject to a dry weather TMDL, monitoring frequency is established per the approved TMDL Monitoring Program.

Unless specified in an approved IMP/CIMP, outfalls not subject to dry weather TMDLs must be monitored at least four times during the first year of monitoring. Due to the expense, Aquatic Toxicity monitoring is only required twice per year. The four times per year monitoring is reflective of the potential for high variability in the quality and volume of non-storm water discharges and duration as opposed to storm water discharges.

Collected monitoring data is to be compared against applicable receiving water limitations, water quality based effluent limitations, non-storm water action levels, or exhibited Aquatic Toxicity as defined in the Parts XII.F and G of the MRP and all exceedances are to be reported in the Integrated Monitoring Compliance Report required in Part XIX.A.5 of the MRP.

After the first year, monitoring for specific pollutants may be reduced to once per year, if the values reported in the first year do not exceed applicable non-storm water WQBELs, non-storm water action levels, or a water quality standard applicable to the receiving water.

After two years of monitoring, the Permittee may submit a written request to the Executive Officer of the Regional Water Board requesting to eliminate monitoring for specific pollutants based on an analysis demonstrating that there is no reasonable potential for the pollutant to exist in the discharge at a concentration exceeding applicable water quality standards.

1. Dry Weather Screening Monitoring

a. Background

Clean Water Act section 402(p) regulates discharges from municipal separate storm sewer systems (MS4s). Clean Water Act section 402(p)(3)(B)(ii) requires the Permittees to effectively prohibit non-storm water from entering the MS4.

Non-exempted, non-storm water discharges are to be effectively prohibited from entering the MS4 or become subject to another NPDES permit (55 Fed.–Reg. 47990, 47995 (Nov.16, 1990)). Conveyances which continue to accept non-exempt, non-storm water discharges do not meet the definition of MS4 and are not subject to Clean Water Act section 402(p)(3)(B) unless the discharges are issued separate NPDES permits. Instead, conveyances that continue to accept non-exempt, non-storm water discharges that do not have a separate NPDES permit are subject to sections 301 and 402 of the CWA (55 Fed.–Reg. –47990, 48037 (Nov. 16, 1990)).

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In part, to implement these statutory provisions, Order No. 01-182 included non-storm water discharge prohibitions. Several categories of non-storm water discharges are specifically identified as authorized or conditionally exempt non-storm water discharges, including:

- i. Discharges covered under an NPDES permit
- ii. Discharges authorized by USEPA under CERCLA
- iii. Discharges resulting from natural flows
- iv. Discharges from emergency fire fighting activity
- v. Some Categories of Discharges incidental to urban activities

Further, as another mechanism to effectively prohibit non-storm water discharges into the MS4, Order No. 01-182 also requires the Los Angeles County MS4 Co-Permittees to implement an illicit connections and illicit discharges elimination program as part of their storm water management program pursuant to 40 CFR section 122.26(d)(2)(iv)(B).

Finally, Monitoring and Reporting Program CI 6948, a part of Order No. 01-182, required dry weather monitoring at the Mass Emissions Stations (MES) to estimate pollutant contributions and determine if the MS4 is contributing to exceedances of applicable water quality standards during dry weather.

b. Evaluation of Dry Weather Data

40 CFR section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard. The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in the Basin Plan and other state plans and policies, or any applicable water quality criteria contained in the California Toxics Rule (CTR) and National Toxics Rule (NTR).

In an effort to evaluate the Discharger's program to effectively prohibit non-storm water discharges into the MS4, as well as to determine whether MS4 discharges are potentially contributing to exceedances of water quality standards, the Reasonable Potential Analysis (RPA) process was used as a screening tool. In doing so, dry weather monitoring data submitted by the Discharger was evaluated to identify where non-storm water discharges may impact beneficial uses and where additional monitoring and/or investigations of non-storm water discharges should be focused.

Order No. 01-182 and Monitoring and Reporting Program No. 6948 required the Discharger to implement core monitoring at seven mass emission stations:

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- Ballona Creek
- Malibu Creek
- Los Angeles River
- San Gabriel River (representing the upper portion of the San Gabriel River Watershed Management Area)
- Coyote Creek (representing the lower portion of the San Gabriel River Watershed Management Area)
- Dominguez Channel
- Santa Clara River

In addition to wet weather monitoring requirements at each of the mass emission stations, a minimum of two dry weather samples were required each year. Monitoring was required for conventional pollutants (BOD, TSS, pH, fecal coliform, oil and grease), priority pollutants, and a variety of other nonconventional pollutants (e.g., nutrients, dissolved oxygen, salinity/conductivity).

Dry weather monitoring data were compiled from Annual Stormwater Monitoring Reports submitted by the Los Angeles County Department of Public Works for the period from 2005 to 2011 to reflect the most recent data. The Annual Stormwater Monitoring Reports include the results for dry weather samples that were collected from 2005 to 2011 on 15 different dates.

For each monitored parameter, the most stringent applicable water quality objective/criterion was identified from the Basin Plan and the CTR at 40 CFR section 131.38. The following assumptions were made when conducting the analysis:

- The mass emissions stations represented only freshwater segments. Accordingly, CTR criteria for the protection of freshwater aquatic life were selected for comparison to monitoring results.
- For hardness-dependent metals, criteria were derived by using the lowest reported dry-weather hardness value for each mass emission station for the period of 2005 to 2011.
- For screening purposes the criteria associated with the most protective beneficial use for any segment within the watershed was selected for comparison to monitoring results.
- Basin Plan surface water quality objectives for minerals (i.e., total dissolved solids, sulfate, and chloride) apply to specific stream reaches within each watershed and are provided in Chapter 3 of the Basin Plan. Where no specific objectives are identified, footnote f to Table 3-8 provides guidelines for protection of various beneficial uses. When guidelines were presented as a range, the most protective (low end of range) value was selected and applied according to beneficial uses in the watershed.
- With the exception of bacteria, the water quality objectives used for the analysis are the most current in effect. Since adoption of Order No. 01-182 in 2001, some Basin Plan objectives and CTR criteria have been amended.

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As a result, the pollutants monitored under the MRP for Order No. 01-182 may not necessarily reflect current objectives.

- *E coli* bacteria was not required as part of the MRP to Order No. 01-182, thus screening for bacteria was based solely on fecal coliform. Monitoring results for fecal coliform were compared to the Basin Plan fecal coliform objective in effect during the monitoring period. The Basin Plan objective for bacteria was amended in December 2011 to omit fecal coliform as a fresh water objective. The existing numeric bacteria objective for freshwater is limited to *E. coli*. The Basin Plan bacteria objectives are expressed as a single sample maximum and a geometric mean. In this screening, limited data precluded calculation of geometric means, therefore, the geometric mean objective was treated as a “not-to-exceed” criterion for screening purposes. The geometric mean objective for fecal coliform is 200/100 ml (the Basin Plan objective to protect primary contact recreation beneficial use (REC-1) uses in freshwaters).
- Within a given watershed, where the Basin Plan designates a “Potential” beneficial use of MUN, drinking water maximum contaminant levels (MCLs) were not applied as the most stringent objectives. Within a given watershed, where the Basin Plan designates “Potential” or “Intermittent” for beneficial uses other than MUN, the appropriate protective objectives were used for screening. This is consistent with Basin Plan requirements and existing permitting procedures.

The maximum reported pollutant concentration was compared to the most stringent applicable water quality objective to determine if there was potential for receiving water concentrations to exceed water quality objectives.

Table F-10 summarizes the results of the RPA analysis based on evaluation of the 15 sets of data for the period of 2005 to 2011 for each of the mass emission stations. Generally, all priority pollutant organic parameters were reported as below detection levels at practical quantitation levels (PQLs) consistent with the minimum levels (MLs) listed in the SIP. The most prevalent pollutants of concern among the mass emission stations include fecal coliform bacteria, cyanide, mercury, chloride, sulfate, total dissolved solids, copper, and selenium. Reported fecal coliform bacteria, cyanide, copper, and selenium concentrations appear to consistently exceed objectives/criteria in all watersheds at relatively high levels. For watersheds where objectives apply for sulfate and total dissolved solids, the receiving water concentrations consistently exceeded the objectives. The incidences where exceedances are indicated for mercury are largely due to analytical detection levels that were higher than the applicable criterion.

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Table F-10. Summary of LA County Watersheds and Frequency of Receiving Water Exceeding Criteria - 2005 to 2011- Dry Season Data Analysis¹

Parameter	Santa Clara River	Los Angeles River	Dominguez Channel	Ballona Creek	Malibu Creek	San Gabriel River	
						Upper Portion	Lower Portion
pH	0/15	7/15	5/15	3/15	0/15	1/14	2/15
Total Coliform	No FW Objective	No FW Objective)	No FW Objective	No FW Objective	No FW Objective	No FW Objective	No FW Objective

Parameter	Santa Clara River	Los Angeles River	Dominguez Channel	Ballona Creek	Malibu Creek	San Gabriel River	
						Upper Portion	Lower Portion
Fecal Coliform	4/15	4/15	10/15	13/15	6/15	11/14	13/15
Enterococcus	No FW Objective	No FW Objective	No FW Objective	No FW Objective	No FW Objective	No FW Objective	No FW Objective
Chloride	15/15	15/15	No Objective	0/15	0/15	14/14	15/15
Dissolved Oxygen	1/15	0/15	0/15	0/15	0/15	√1/14	0/15
Nitrate-N	0/15	0/15	No Objective	No Objective	0/15	7/14	No Objective
Nitrite-N	0/15	3/15	No Objective	No Objective	0/15	0/15	No Objective
Methylene Blue Active Substances	4/15	0/15	No Objective	No Objective	0/15	0/14	No Objective
Sulfate	15/15	15/15	No Objective	No Objective	15/15	14/14	15/15
Total Dissolved Solids	15/15	15/15	No Objective	No Objective	13/15	14/14	15/15
Turbidity ²	0/15	2/15	No Objective	No Objective	0/15	0/15	0/15
Cyanide	11/15	14/15	4/15	15/15	3/15	14/14	15/15
Total Aluminum	1/15	2/15	No Objective	No Objective	0/15	1/14	No Objective
Dissolved Copper	0/15	0/15	5/15	0/15	0/15	13/14	0/15
Total Copper	1/15	6/15	11/15	3/15	0/15	13/14	2/15
Dissolved Lead	0/15	0/15	0/15	0/15	0/15	1/14	0/15
Total Lead	0/15	0/15	1/15	1/15	0/15	13/14	0/15
Total Mercury	15/15	14/15	14/15	15/15	15/15	14/14	15/15
Dissolved Mercury	15/15	15/15	15/15	15/15	15/15	14/14	14/14
Total Nickel	0/15	0/15	0/15	0/15	0/15	1/14	0/15
Dissolved Selenium	2/15	2/15	1/15	2/15	6/15	1/15	10/11
Total Selenium	2/15	2/15	1/15	2/15	6/15	1/15	10/11
Dissolved Zinc	0/15	0/15	0/15	0/15	0/15	7/10	0/15
Total Zinc	0/15	0/15	0/15	0/15	0/15	10/10	0/15

¹ Frequency of exceedance is denoted as number of exceedances/number of dry weather samples evaluated. For example, "2/15" indicates 2 of the 15 samples had analytical results that exceeded the water quality objective for a given parameter.

² The Basin Plan objective for turbidity for the protection of MUN is the secondary MCL of 5 NTU. The Basin Plan contains additional turbidity objectives expressed as incremental changes over natural conditions. Since inadequate data were available to assess criteria expressed as incremental changes, only the MCL was considered in the analysis.

c. Requirements for Controlling Non-Storm Water Discharges

The USEPA’s approach for non-storm water discharges from MS4s is to regulate these discharges under the existing CWA section 402 NPDES framework for discharges to surface waters. The NPDES program (40 CFR section 122.44(d)) utilizes discharge prohibitions and effluent limitations as regulatory mechanisms to regulate non-storm water discharges, including the use of technology- and water quality-based effluent limitations. Non-numerical controls, such as BMPs for non-storm water discharges may only be authorized where numerical effluent limitations are infeasible.

As described in Table F-10 above, there were a number of pollutants for which it was determined that receiving water concentrations at the mass emission stations indicate possible exceedances of water quality standards within the watershed. However, for waterbody-pollutant combinations not subject to a TMDL, there is uncertainty regarding whether exceedances occurred within specific segments where standards apply; the extent to which non-storm water

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discharges from the MS4 have caused or contributed to any exceedances; and whether the exceedances are attributable to any one or more specific MS4 outfalls within the watershed management area.

Given the need for additional data on non-stormwater discharges from the MS4 where a TMDL has not been developed, USEPA and the State have used action levels as a means to gauge potential impact to water quality and to identify the potential need for additional controls for non-stormwater discharges in the future. If these action levels are exceeded, then additional requirements (e.g., numeric effluent limitations, increased monitoring, special studies, additional BMPs) are typically used to address the potential impacts. In this case, non-storm water action levels are applicable to non-storm water discharges from that MS4 outfall. Non-storm water discharges from the MS4 are those which occur during dry weather conditions. These action levels are not applied to storm water discharges, as defined within this Order. Storm water discharges regulated by this Order are required to meet the MEP standard and other provisions determined necessary by the State to control pollutants and have separate requirements under this Order.

The use of action levels in this Order does not restrict the Regional Water Boards ability to modify this Order in accordance with 40 CFR section 122.62 to include numeric effluent limitations should monitoring data indicate that controls beyond action levels are necessary to ensure that non-storm water discharges do not cause or contribute to exceedances of water quality standards.

i. Approach for Deriving Action Levels

Where exceedances are indicated in Table F-10 and where a TMDL has not been developed, action levels are applied as a screening tool to indicate where non-storm water discharges, including exempted flows and illicit connections may be causing or contributing to exceedances of water quality objectives. Action levels in this Order are based upon numeric or narrative water quality objectives and criteria as defined in the Basin Plan, the Water Quality Control Plan for Ocean Waters of California (Ocean Plan), and the CTR.

(1) Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries

Priority Pollutants Subject to the CTR

Priority pollutant water quality criteria in the CTR are applicable to all inland surface waters, enclosed bays, and estuaries. The CTR contains both saltwater and freshwater criteria. Because a distinct separation generally does not exist between freshwater and saltwater aquatic communities, the following apply, in accordance with Section 131.38(c)(3):

- For waters in which the salinity is equal to or less than 1 part per thousand (ppt), the freshwater criteria apply.

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- For waters in which the salinity is greater than 10 ppt 95 percent or more of the time, the saltwater criteria apply.
- For waters in which the salinity is between 1 ppt and 10 ppt, the more stringent of the freshwater or saltwater criteria apply.

For continuous discharges, 40 CFR section 122.45(d)(1) specifies daily maximum and average monthly effluent limitations. Because of the uncertainty regarding the frequency of occurrence and duration of non-storm water discharges through the MS4, average monthly action levels (AMALs) and maximum daily action levels (MDALs) were calculated following the procedure based on the steady-state model, available in Section 1.4 of the SIP. The SIP procedures were used to calculate action levels for CTR priority pollutants and other constituents for which the Basin Plan contains numeric objectives.

Since many of the streams in the Region have minimal upstream flows, mixing zones and dilution credits are usually not appropriate. Therefore, in this Order, no dilution credit is being allowed.

40 CFR section 122.45(c) requires that effluent limitations for metals be expressed as total recoverable concentration; therefore it is appropriate to include action levels also as a total recoverable concentration. The SIP requires that if it is necessary to express a dissolved metal value as a total recoverable and a site-specific translator has not yet been developed, the Regional Water Board shall use the applicable conversion factor contained in the 40 CFR section 131.38.

Using nickel as an example, and assuming application of saltwater criteria (e.g., a situation where an MS4 outfall discharges to an estuary), the following demonstrates how action levels were established for this Order. The tables in Attachment H provide the action levels for each watershed management area addressed by this Order using the process described below.

The process for developing these limits is in accordance with Section 1.4 of the SIP. Two sets of AMAL and MDAL values are calculated separately, one set for the protection of aquatic life and the other for the protection of human health (consumption of organisms only). The AMALs and MDALs for aquatic life and human health are compared, and the most restrictive AMAL and the most restrictive MDAL are selected as the action level.

Step 1: For each constituent requiring an action level, identify the applicable water quality criteria or objective. For each criterion, determine the effluent concentration allowance (ECA) using the following steady state mass balance equation:

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$$ECA = C + D(C-B) \text{ when } C > B, \text{ and}$$

$$ECA = C \text{ when } C \leq B,$$

Where:

- C = The priority pollutant criterion/objective, adjusted if necessary for hardness, pH and translators (criteria for saltwater are independent of hardness and pH).
- D = The dilution credit, and
- B = The ambient background concentration

As discussed above, for this Order, dilution was not allowed; therefore:

$$ECA = C$$

For nickel the applicable ECAs are:

$$ECA_{acute} = 75 \mu\text{g/L}$$

$$ECA_{chronic} = 8.3 \mu\text{g/L}$$

Step 2: For each ECA based on aquatic life criterion/objective, determine the long-term average discharge condition (LTA) by multiplying the ECA by a factor (multiplier). The multiplier is a statistically based factor that adjusts the ECA to account for effluent variability. The value of the multiplier varies depending on the coefficient of variation (CV) of the data set and whether it is an acute or chronic criterion/objective. Table 1 of the SIP provides pre-calculated values for the multipliers based on the value of the CV. Equations to develop the multipliers in place of using values in the tables are provided in Section 1.4, Step 3 of the SIP and will not be repeated here.

$$LTA_{acute} = ECA_{acute} \times \text{Multiplier}_{acute}$$

$$LTA_{chronic} = ECA_{chronic} \times \text{Multiplier}_{chronic}$$

The CV for the data set must be determined before the multipliers can be selected and will vary depending on the number of samples and the standard deviation of a data set. If the data set is less than 10 samples, or at least 80% of the samples in the data set are reported as non-detect, the CV shall be set equal to 0.6. For nickel, a CV of 0.6 was assumed.

For nickel, the following data were used to develop the acute and chronic LTA using equations provided in Section 1.4, Step 3 of the SIP (Table 1 of the SIP also provides this data up to three decimals):

CV	ECA Multiplier _{acute}	ECA Multiplier _{chronic}
0.6	0.32	0.53

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$$LTA_{acute} = 75 \mu\text{g/L} \times 0.32 = 24 \mu\text{g/L}$$

$$LTA_{chronic} = 8.3 \mu\text{g/L} \times 0.53 = 4.4 \mu\text{g/L}$$

Step 3: Select the most limiting (lowest) of the LTA.

LTA = most limiting of LTA_{acute} or $LTA_{chronic}$

For nickel, the most limiting LTA was the $LTA_{chronic}$

$$LTA_{nickel} = LTA_{chronic} = 4.4 \mu\text{g/L}$$

Step 4: Calculate the action levels by multiplying the LTA by a factor (multiplier). Action levels are expressed as AMAL and MDAL. The multiplier is a statistically based factor that adjusts the LTA for the averaging periods and exceedance frequencies of the criteria/objectives and the action levels. The value of the multiplier varies depending on the probability basis, the CV of the data set, the number of samples (for AMAL) and whether it is a monthly or daily limit. Table 2 of the SIP provides pre-calculated values for the multipliers based on the value of the CV and the number of samples. Equations to develop the multipliers in place of using values in the tables are provided in Section 1.4, Step 5 of the SIP and will not be repeated here.

$$AMAL_{aquatic\ life} = LTA \times AMAL_{multiplier\ 95}$$

$$MDAL_{aquatic\ life} = LTA \times MDAL_{multiplier\ 99}$$

AMAL multipliers are based on a 95th percentile occurrence probability, and the MDAL multipliers are based on the 99th percentile occurrence probability. If the number of samples is less than four (4), the default number of samples to be used is four (4).

For nickel, the following data were used to develop the AMAL and MDAL for action levels using equations provided in Section 1.4, Step 5 of the SIP (Table 2 of the SIP also provides this data up to two decimals):

No. of Samples Per Month	CV	Multiplier _{MDAL 99}	Multiplier _{AMAL 95}
4	0.6	3.11	1.55

Therefore:

$$AMAL = 4.4 \mu\text{g/L} \times 1.55 = 6.8 \mu\text{g/L}$$

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$$MDAL = 4.4 \mu\text{g/L} \times 3.11 = 14 \mu\text{g/L}$$

Step 5: For the ECA based on human health, set the AMAL equal to the $ECA_{\text{human health}}$

$$AMAL_{\text{human health}} = ECA_{\text{human health}}$$

For nickel:

$$AMAL_{\text{human health}} = 4,600 \mu\text{g/L}$$

Step 6: Calculate the MDAL for human health by multiplying the AMAL by the ratio of the $Multiplier_{MDAL}$ to the $Multiplier_{AMAL}$. Table 2 of the SIP provides pre-calculated ratios to be used in this calculation based on the CV and the number of samples.

$$MDAL_{\text{human health}} = AMAL_{\text{human health}} \times (Multiplier_{MDAL} / Multiplier_{AMAL})$$

For nickel, the following data were used to develop the $MDAL_{\text{human health}}$:

No. of Samples Per Month	CV	$Multiplier_{MDAL\ 99}$	$Multiplier_{AMAL\ 95}$	Ratio
4	0.6	3.11	1.55	2.0

For nickel:

$$MDAL_{\text{human health}} = 4,600 \mu\text{g/L} \times 2 = 9,200 \mu\text{g/L}$$

Step 7: Select the lower of the AMAL and MDAL based on aquatic life and human health as the non-storm water action level for this Order.

$AMAL_{\text{aquatic life}}$	$MDAL_{\text{aquatic life}}$	$AMAL_{\text{human health}}$	$MDAL_{\text{human health}}$
6.8	14	4,600	9,200

For nickel, the lowest (most restrictive) levels are based on aquatic toxicity and serve as the basis for non-storm water action levels included in this Order.

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Table F-11: Calculations of Freshwater Action Levels¹

Parameter	Units	CV	Aquatic Life Criteria ²		Human Health Criteria	HH Calculations			Aquatic Life Calculations								Final Effluent Limitations		
			C acute = CMC tot	C chronic = CCC tot		HH-Organisms only	ECA _{HH} = AMAL _{HH}	AMAL/MDAL Multiplier _{HH}	MDAL _{HH}	ECA Multiplier _{acute}	LTA _{acute}	ECA Multiplier _{chronic}	LTA _{chronic}	Lowest LTA	AMAL Multiplier _{qs}	AMAL _{AL}	MDAL Multiplier _{qs}	MDAL _{AL}	Lowest AMAL
Cadmium	µg/L	0.6	4.52	2.46	N		2.01		0.321	1.45	0.527	1.30	1.30	1.55	2.02	3.11	4.0	2.0	4.0
Copper	µg/L	0.6	14.00	9.33			2.01		0.321	4.49	0.527	4.92	4.49	1.55	6.98	3.11	14	7.0	14
Lead	µg/L	0.6	81.65	3.18	N		2.01		0.321	26.21	0.527	1.68	1.68	1.55	2.61	3.11	5.2	2.6	5.2
Mercury	µg/L	0.6	R	R	0.051	0.051	2.01	0.1023										0.051	0.10
Nickel	µg/L	0.6	469.17	52.16	4600	4600	2.01	9228	0.321	150.6	0.527	27.51	27.51	1.55	42.71	3.11	86	43	86
Selenium	µg/L	0.6	20.00	5.00	N		2.01		0.321	6.42	0.527	2.64	2.64	1.55	4.09	3.11	8.2	4.1	8.2
Silver	µg/L	0.6	4.06				2.01		0.321	1.30	0.527		1.30	1.55	2.02	3.11	4.1	2.0	4.1
Zinc	µg/L	0.6	119.82	119.82			2.01		0.321	38.47	0.527	63.20	38.47	1.55	59.72	3.11	120	60	120
Cyanide	µg/L	0.6	22.00	5.20	22,0000	22,0000	2.01	44,1362	0.321	7.06	0.527	2.74	2.74	1.55	4.26	3.11	8.5	4.3	8.5

R = Reserved
N = Narrative

¹ Calculations include rounded results. Final AMALs/MDALs are rounded to 2 significant digits.
² Where criteria are based on hardness, a value of 100 mg/L CaCO₃ was used for these sample calculations.

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Calculations of Saltwater Action Levels

Parameter	Units	CV	Aquatic Life Criteria		Human Health Criteria	HH Calculations			Aquatic Life Calculations								Final Effluent Limitations		
			C acute = CMC tot	C chronic = CCC tot	HH-Organisms only	ECA _{HH} = AMAL _{HH}	AMAL/MDAL Multiplier _{HH}	MDAL _{HH}	ECA Multiplier _{acute}	LTA _{acute}	ECA Multiplier _{chronic}	LTA _{chronic}	Lowest LTA	AMAL Multiplier _{eg}	AMAL _{AL}	MDAL Multiplier _{eg}	MDAL _{AL}	Lowest AMAL	Lowest MDAL
Cadmium	ug/L	0.6	42.25	9.36	N		2.01		0.321	13.57	0.527	4.93	4.93	1.55	7.66	3.11	15.4	7.7	15
Copper	ug/L	0.6	5.78	3.73			2.01		0.321	1.86	0.527	1.97	1.86	1.55	2.88	3.11	5.8	2.9	5.8
Lead	ug/L	0.6	220.82	8.52	N		2.01		0.321	70.90	0.527	4.49	4.49	1.55	6.97	3.11	14	7.0	14
Mercury	ug/L	0.6	R	R	0.051	0.051	2.01	0.1023										0.051	0.10
Nickel	ug/L	0.6	74.75	8.28	4600	4600	2.01	9228	0.321	24.00	0.527	4.37	4.37	1.55	6.78	3.11	14	6.8	14
Selenium	ug/L	0.6	290.58	71.14	N		2.01		0.321	93.30	0.527	37.52	37.52	1.55	58.25	3.11	117	58	117
Silver	ug/L	0.6	2.24				2.01		0.321	0.72	0.527		0.72	1.55	1.11	3.11	2.2	1.1	2.2
Zinc	ug/L	0.6	95.14	85.62			2.01		0.321	30.55	0.527	45.16	30.55	1.55	47.42	3.11	95	47	95
Cyanide	ug/L	0.6	1.00	1.00	22.0000	22.0000	2.01	44.1362	0.321	0.32	0.527	0.53	0.32	1.55	0.50	3.11	1.0	0.50	1.0

R = Reserved
N = Narrative

† Calculations include rounded results. Final AMALs/MDALs are rounded to 2 significant digits.

REVISIONS

NARRATIVE

Basin Plan Requirements for Other Pollutants

A number of pollutants were identified that exceed applicable Basin Plan objectives. These objectives however, are not amenable to the SIP process for developing action levels.

Resolution No. 01-018, Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Bacteria Objectives for Water Bodies Designated for Water Contact Recreation, adopted by the Regional Water Board on October 25, 2001, served as the basis for the action levels for bacteria. Subsequently, the Basin Plan was amended through Order No. R10-005 (effective on December 5, 2011) to remove the freshwater fecal coliform numeric objective while retaining the freshwater objective for *E. coli*. The dry-weather evaluation conducted for fecal coliform indicates of a need for a bacteria action level. Since the Basin Plan no longer contains freshwater objectives for fecal coliform, action levels have been developed for *E. coli* in freshwater. The current bacteria objectives (saltwater and freshwater) are applied directly to the MS4 outfalls discharging to freshwaters to serve as action levels.

The Basin Plan, in Tables 3-5 through 3-7, include chemical constituents objectives based on the incorporation of Title 22, Drinking Water Standards, by reference, to protect the surface water MUN beneficial use. The Basin Plan in Tables 3-8 and 3-10 also includes mineral quality objectives that apply to specific watersheds and stream reaches and where indicated by the beneficial use of ground water recharge (GWR). These objectives contained in the Basin Plan are listed as not-to-exceed values. Consistent with the approach used by the Regional Water Board in other Orders for dry weather discharges, these not-to-exceed values will be applied as AMALs in this Order.

(2) Discharges to the Surf Zone

From the Table B water quality objectives of the Ocean Plan, action levels are calculated according to Equation 1 of the Ocean Plan for all pollutants:

$$C_e = C_o + D_m(C_o - C_s)$$

Where:

- C_e = the Action Level ($\mu\text{g/L}$)
- C_o = the water quality objective to be met at the completion of initial dilution ($\mu\text{g/L}$)
- C_s = background seawater concentration ($\mu\text{g/L}$)
- D_m = minimum probable initial dilution expressed as parts seawater per part wastewater

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The D_m is based on observed waste flow characteristics, receiving water density structure, and the assumption that no currents of sufficient strength to influence the initial dilution process flow across the discharge structure. Initial dilution is the process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge. It is conservatively assumed that when non-storm water discharges to the surf zone occur, that conditions are such that no rapid mixing would occur. Therefore, an initial dilution is not allowed and the formula above reduces to:

$$C_e = C_o$$

The following demonstrates how the action levels for copper are established.

Copper

$C_e = 3 \mu\text{g/L}$ (6-Month Median)

$C_e = 12 \mu\text{g/L}$ (Daily Maximum)

$C_e = 30 \mu\text{g/L}$ (Instantaneous Maximum)

ii. Applicability of Action Levels

The action levels included in this Order apply to pollutants in non-storm water discharges from the MS4 to receiving waters that are not already subject to WQBELs to implement TMDL wasteload allocations applicable during dry weather.

This Order requires outfall-based monitoring throughout each Watershed Management Area, including monitoring during dry weather. The dry weather monitoring data will be evaluated by the Permittee(s) in comparison to all applicable action levels.

iii. Requirements When Action Levels are Exceeded

When monitoring data indicates an action level is exceeded for one or more pollutants, then the Permittee will be required to implement actions to identify the source of the non-storm water discharge, and depending on the identified source, implement an appropriate response. With respect to action levels, the Permittee will have identified appropriate procedures within the Watershed Management Program (Part VI.C) and the Illicit Connection and Illicit Discharge Elimination Program (Part VI.D.9).

G. New Development/Re-Development ~~Effectiveness Monitoring~~ Tracking

This Order requires the use of Low Impact Development (LID) designs to reduce storm water runoff (and pollutant discharges) from new development or re-development projects. In areas that drain to water bodies that have been armored or are not natural drainages, the goal of this requirement is to protect water quality by retaining on-site the

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storm water runoff from the 85th percentile storm event. This is the design storm used throughout most of California for water quality protection. If it is not technically feasible due to site constraints (e.g., close proximity to a drinking water supply, slope instability) or if instead the project proponent is proposing to supplement a groundwater replenishment project, the project proponent may provide treatment BMPs to reduce pollutant loading in storm water runoff from the project site. Flow through treatment BMPs are less effective in reducing pollutant loadings than on-site retention for the design storm. Therefore the project proponent must mitigate the impacts further by providing for LID designs at retrofit projects or other off-site locations within the same subwatershed. The effectiveness monitoring is designed to assess and track whether post construction operation of the LID designs are effective in retaining the design storm runoff volume.

For projects located in natural drainages, the goal of the LID design is to retain the pre-development hydrology, unless a water body is not susceptible to hydromodification effects (e.g., estuaries or the ocean). Smaller projects that will disturb less than 50 acres of land are presumed to meet the criteria if the project retains the storm water runoff from the 95th percentile storm. The effectiveness monitoring in this situation should be design to confirm that storm water runoff is not occurring for any storm at or less than the 95th percentile storm. Projects may also demonstrate compliance by showing that the erosion potential will be approximately 1 as described in Attachment J of this Order. For larger projects, the project proponent may be required to conduct modeling to demonstrate compliance by comparing the hydrographs of a two-year storm for the pre-development and post-development conditions, or by comparing the flow duration curves for a reference watershed and the post project condition. Flow monitoring will be required to substantiate the simulated hydrographs or flow duration curves.

Monitoring studies conducted by the California Department of Public Health (CDPH) have documented that mosquitoes opportunistically breed in structural storm water Best Management Practices (BMPs), particularly those that hold standing water for over 96 hours. Certain Low Impact Development (LID) site design measures that hold standing water such as rainwater capture systems may similarly produce mosquitoes. BMPs and LID design features should incorporate design, construction, and maintenance principles to promote drainage within 96 hours to minimize standing water available to mosquitoes. This Order requires regulated MS4 Permittees to coordinate with other agencies necessary to successfully implement the provisions of this Order. These agencies may include CDPH and local mosquito and vector control agencies on vector-related issues surrounding implementation of post-construction BMPs.

This Order is not intended to prohibit the inspection for or abatement of vectors by the State Department of Public Health or local vector agencies in accordance with CA Health and Safety Code, § 116110 et seq. and Water Quality Order No. 2012-0003-DWQ.

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H. Regional Studies

1. ~~Pyrethroid Insecticides Study Requirements~~

~~In addition to routine monitoring, this Order requires the Permittees to conduct regional studies of Pyrethroid toxicity[†] in receiving waters as Pyrethroid toxicity has become an emerging issue in urban drainages. The Pyrethroid Toxicity monitoring program required in this Order is based on the Ventura County MS4 Monitoring and Reporting Plan.~~

~~The results of the receiving water monitoring, Pyrethroid Study and bioassessment surveys may be used in to optimize Watershed Management Program actions, as described in Part VI.C. of this Order (Watershed Management Programs).~~

2.1. ~~Southern California Stormwater Monitoring Coalition Watershed Monitoring Program~~

~~Also, ~~a~~As a condition to this Order, Permittees must participate in the bioassessment studies conducted under the Southern California Stormwater Monitoring Coalition Watershed Monitoring Program. Bioassessment provides a direct measure of whether aquatic life beneficial uses are fully supported and integrates the effects of multiple factors including pollutant discharges, changes in hydrology, geomorphology, and riparian buffers.~~

I. Aquatic Toxicity Monitoring Methods

Based on the stated goals of the CWA, the USEPA and individual states implement three approaches to monitoring water quality. These approaches include chemical-specific monitoring, toxicity testing, and bioassessments (USEPA 1991a). Each of the three approaches has distinct advantages and all three work together to ensure that the physical, chemical and biological integrity of our waters are protected. Water quality objectives have been developed for only a limited universe of chemicals. For mixtures of chemicals with unknown interactions or for chemicals having no chemical-specific objectives, the sole use of chemical-specific objectives to safeguard aquatic resources would not ensure adequate protection. Aquatic life in southern California coastal watersheds are often exposed to nearly 100% effluent from wastewater treatment plants, urban runoff, or storm water; therefore, toxicity testing and bioassessments are also critical components for monitoring programs as they offer a more direct and thorough confirmation of biological impacts. The primary advantage of using the toxicity testing approach is that this tool can be used to assess toxic effects (acute and chronic) of all the chemicals in aqueous samples of effluent, receiving water, or storm water. This allows the cumulative effect of the aqueous mixture to be evaluated, rather than

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[†] Weston et al. 2006. *Pyrethroid Pesticide Insecticides and Sediment Toxicity in Urban Creeks from California and Tennessee*. Environ. Sci. Technol. 2006. 40, 1700-1706.

- Holmes et al. 2008. *Statewide Investigation of the Role of Pyrethroid Pesticides in Sediment Toxicity in California's Urban Waterways*. Environ. Sci. Technol. 2008. 7003-7009.

the toxic responses to individual chemicals (USEPA, EPA Regions 8, 9, and 10 Toxicity Training Tool, January 2010).

Based on available data from the LA County MS4 Permit Annual Monitoring Reports, samples collected at mass emissions stations during both wet weather and dry weather have been found to be toxic in the San Gabriel River, Coyote Creek, the Los Angeles River, Dominguez Channel, Ballona Creek, Malibu Creek, and the Santa Clara River, demonstrating the need for this toxicity monitoring requirement (see Table below).

Summary of Toxicity by Watershed							
Source and Season	San Gabriel River	Coyote Creek	Los Angeles River	Dominguez Channel	Ballona Creek	Malibu Creek	Santa Clara River
Integrated Receiving Water Impacts Report (1994-2005)							
Wet Weather	-	CDS, CDR, SUF	CDS, SUF	CDS, CDR, SUF	CDR, SUF	CDR	CDS
Dry Weather	-	SUF	SUF	SUF	SUF	-	-
Annual Monitoring Reports (2005-2010)							
Wet Weather							
2005-06	-	-	SUF	CDS, CDR, SUF	SUF	-	-
2006-07	SUF	SUF	SUF	SUF	SUF	SUF	SUF
2007-08	SUF	-	-	SUF	-	CDS,CDR,SUF	SUF
2008-09	-	SUF	SUF	-	SUF	CDS,CDR,SUF	-
2009-10	-	-	-	-	-	-	-
Dry Weather							
2005-06	-	-	-	-	-	CDS,CDR	-
2006-07	-	-	-	-	SUF	-	-
2007-08	-	-	CDS,CDR	-	SUF	-	-
2008-09	-	-	SUF	-	-	-	-
2009-10	-	-	-	-	-	-	-

Notes:

- CDS= Ceriodaphnia survival toxicity
- SUF= Sea Urchin fertilization toxicity
- CDR= Ceriodaphnia reproduction toxicity

This Order requires Permittee(s) to conduct acute-chronic toxicity tests (96-hour static renewal toxicity tests) on water samples, by methods specified in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002; Table IA, 40 CFR Part 136) 40 CFR Part 136 which cites USEPA's *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, October 2002,*

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~~USEPA, Office of Water, Washington D.C. (EPA/821/R-02/012) or a more recent edition.~~

~~To determine the most sensitive test species, the Permittee(s) shall conduct two wet weather and two dry weather toxicity tests with a vertebrate, an invertebrate, and a plant. After this screening period, subsequent monitoring shall be conducted using the most sensitive test species. Alternatively, if a sensitive test species has already been determined, or if there is prior knowledge of potential toxicant(s) and a test species is sensitive to such toxicant(s), then monitoring shall be conducted using only that test species. Sensitive test species determinations shall also consider the most sensitive test species used for proximal receiving water monitoring. After the screening period, subsequent monitoring shall be conducted using the most sensitive test species. Rescreening shall occur in the fourth year of the permit term. In the selection of test species, USEPA recommends the use of species from ecologically diverse taxa. The recommendation is to screen an effluent with at least three species (a fish, an invertebrate, and a plant) for chronic testing and two species (a fish and an invertebrate) for acute testing. This recommendation is based upon the fact that there are species sensitivity differences among different groups of organisms to different toxicants (USEPA, EPA Regions 8, 9, and 10 Toxicity Training Tool, January 2010).~~

~~For freshwater, this Order requires the Permittee(s) to conduct the chronic toxicity test in accordance with USEPA's Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms Fourth Edition, October 2002, (EPA/821/R-02/013), or a more recent edition.~~

~~For brackish water, this Order requires the Permittee(s) to conduct the chronic toxicity test in accordance with USEPA's Short-Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to West Coast Marine and Estuarine Organisms, First Edition, August 1995, (EPA/600/R-95/136), or Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, Third Edition, October 2002, (EPA/821-R-02-014), or a more recent edition.~~

~~This Order proposes the use of 3 organisms for chronic toxicity testing, but for acute testing, where the fish species is found to be the most sensitive of the two species tested, only fish (2 species) will be used for acute testing in cases where 2 fish species, tolerant of different salinities) are required based on the expected salinity of the receiving water. In cases where only one fish species is needed, both the fish and invertebrate test will be performed. In cases where the invertebrate is the most sensitive species, both the invertebrate and fish tests will be required. Rescreening of the test species is required to verify the most sensitive test species are being used.~~

~~Furthermore, the toxicity component of the Monitoring Program includes toxicity identification procedures so that pollutants that are causing or contributing to acute or chronic effects in aquatic life exposed to these waters can be identified and others can be discounted. TIEs are needed to identify the culprit constituents to be used to prioritize management actions. Once Where these constituentstoxicants are identified in a MS4 discharge, the first phase of a Toxicity the Order requires a Toxicity -Reduction~~

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~~Plan (TRE) is to conduct a Toxicity Identification Plan (TIE). TIEs are needed to identify the culprit constituents to be used to prioritize management actions.~~

~~In this Order, Permittee(s) are required to prepare and submit a copy of the Permittee(s)'s initial investigation TRE workplan to the Executive Officer of the Regional Water Board for approval. The Permittee(s) shall use USEPA manuals EPA/600/2-88/070 (industrial) or EPA/833B-99/002 (municipal) as guidance. This workplan shall describe the steps the Permittee(s) intends to follow if toxicity is detected, and shall include, at a minimum:~~

- ~~• A description of the investigation and evaluation techniques that will be used to identify potential causes and sources of toxicity, effluent variability, and MCM and/or BMP efficiency.~~
- ~~• A description of the Permittee(s) methods for minimizing the toxicity of storm water and non-storm water discharges.~~
- ~~• If a TIE is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor).~~

TRE development and implementation is directly tied to the integrated monitoring programs and watershed management program, to ensure that management actions and follow-up monitoring are implemented when problems are identified. Permittees are encouraged to coordinate TREs with concurrent TMDLs where overlap exists. If a TMDL is being developed or implemented for an identified toxic pollutant, much of the work necessary to meet the objectives of a TRE may already be underway, and information and implementation measures should be shared.

Overall, the toxicity monitoring program will assess the impact of storm water and non-storm water discharges on the overall quality of aquatic fauna and flora and implement measures to ensure that those impacts are eliminated or reduced. As stated previously, chemical monitoring does not necessarily reveal the totality of impacts of storm water on aquatic life and habitat-related beneficial uses of water bodies. Therefore, toxicity requirements are a necessary component of the MS4 monitoring program.

J. Special Studies

Requirements to conduct special studies as described in TMDL Implementation Plans that were approved by the Executive Officer of the Regional Water Board prior to the effective date of this Order are incorporated into this Order by reference.

K. Annual Reporting

The Annual Reporting requirement was also required in Order No. 01-182 and provides summary information to the Regional Water Board on each Permittee's participation in one or more Watershed Management Programs; the impact of each Permittee(s) storm water and non-storm water discharges on the receiving water; each Permittee's compliance with receiving water limitations, numeric water quality based effluent limitations, and non-storm water action levels; and the effectiveness of each

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Permittee(s) control measures in reducing discharges of pollutants from the MS4 to receiving waters. In addition the Annual Report allows the Regional Water Board to assess whether the quality of MS4 discharges and the health of receiving waters is improving, staying the same, or declining as a result watershed management program efforts, and/or TMDL implementation measures, or other Control Measures and whether changes in water quality can be attributed to pollutant controls imposed on new development, re-development, or retrofit projects. The Annual Report provides the Permittee(s) a forum to discuss the effectiveness of its past and ongoing control measure efforts and to convey its plans for future control measures as well as a way to present data and conclusions in a transparent manner so as to allow review and understanding by the general public. Overall the Annual Report allows Permittee's to focus reporting efforts on watershed condition, water quality assessment, and an evaluation of the effectiveness of control measures.

L. Watershed Summary Information, Organization and Content

As a means to establish a baseline and then identify changes or trends, for each watershed, each Permittee shall provide the information on its watershed management area, subwatershed area, and drainage areas within the subwatershed area in its odd year Annual Report (e.g., Year 1, 3, 5). The requested information should be provided for each watershed within the Permittee's jurisdiction. Alternatively, permittees participating in a Watershed Management Program may provide the requested information through the development and submission of a Watershed Management Program report or within a TMDL Implementation Plan Annual Report. However, in either case, the Permittee shall bear responsibility for the completeness and accuracy of the referenced information. This reporting requirement helps to ensure that both the Permittee and the Regional Water Board have up to date information on the status of each of their watersheds and subwatersheds.

M. Jurisdictional Assessment and Reporting

The requested information shall be provided for each watershed within the Permittee's jurisdiction. Annual Reports submitted on behalf of a group of Watershed Permittees shall clearly identify all data collected and strategies, control measures, and assessments implemented by each Permittee within its jurisdiction as well as those implemented by multiple Permittees on a watershed scale. Permittees must provide information on storm water control measures, an effectiveness assessment of storm water control measures, information on non-storm water control measures, an effectiveness assessment of non-storm water control measures, an integrated monitoring compliance report, information on adaptive management strategies, and supporting data and information. The addition of this reporting requirement serves as a mechanism to evaluate and ensure the protection of receiving water quality on a watershed scale. If Permittees do not elect to develop a Watershed Management Program, all required information shall be provided by the Permittee for its jurisdiction.

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N. TMDL Reporting

Reporting requirements included in this Order and Attachment E (MRP) were established during the TMDL development process for each individual TMDL. These reporting requirements have incorporated into this Order to implement TMDL requirements.

XIV. CALIFORNIA WATER CODE SECTION 13241 SOCIOECONOMIC CONSIDERATIONS

California Water Code section 13241 requires the Regional Water Board to consider certain factors, including economic considerations, in the adoption of water quality objectives. California Water Code section 13263 requires the Board to take into consideration the provisions of section 13241 in adopting waste discharge requirements. In *City of Burbank v. State Water Resources Control Board* (2005) 35 Cal.4th 613, the California Supreme Court considered whether regional water boards must comply with section 13241 when issuing waste discharge requirements under section 13263(a) by taking into account the costs a permittee will incur in complying with the permit requirements. The Court concluded that whether it is necessary to consider such cost information “depends on whether those restrictions meet or exceed the requirements of the federal Clean Water Act.” (*Id.* at p. 627.) The California Supreme Court has ruled that although California Water Code section 13263 requires the Water Boards to consider the factors set forth in California Water Code section 13241 when issuing an NPDES permit, the Wregional water Boards boards may not consider the factors in section 13241, including economics, to justify imposing pollutant restriction that are less stringent than the applicable federal regulations law requires. (*Id.* at pp. 618, 626-627. “[Water Code slection 13377 specifies that [] discharge permits issued by California’s regional boards must meet the federal standards set by federal law. In effect, section 13377 forbids a regional board’s consideration of any economic hardship on the part of the permit holder if doing so would result in the dilution of the requirements set by Congress in the Clean Water Act...Because section 13263 cannot authorize what federal law forbids, it cannot authorize a regional board, when issuing a [] discharge permit, to use compliance costs to justify pollutant restrictions that do not comply with federal clean water standards”]. *City of Burbank v. State Water Resources Control Bd.* (2005) 35 Cal.4th 613, 618, 627)- However, when the pollutant restrictions in an NPDES permit are more stringent than federal law requires, California Water Code section 13263 requires that the Water Boards consider the factors described in section 13241 as they apply to those specific restrictions.

The Regional Water Board finds that the requirements in this Order are not more stringent than the minimum federal requirements. Among other requirements, federal law requires MS4 permits to include requirements to effectively prohibit non-storm water discharges into the storm sewers, in addition to requiring controls to reduce the discharge of pollutants in storm water to the maximum extent practicable and other provisions that the agency determines are necessary for the control of pollutants in MS4 discharges. The requirements in this Order may be more specific or detailed than those enumerated in federal regulations under 40 CFR § 122.26 or in USEPA guidance. However, the requirements have been designed to be consistent with and within the federal statutory mandates described in Clean Water Act section 402(p)(3)(B)(ii) and (iii) and the related federal regulations and

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guidance. Consistent with federal law, all of the conditions in this Order could have been included in a permit adopted by USEPA in the absence of the in lieu authority of California to issue NPDES permits. Moreover, the inclusion of numeric WQBELs in this Order does not cause the permit to be more stringent than current federal law. Federal law authorizes both narrative and numeric effluent limitations to meet state water quality standards. The inclusion of WQBELs as discharge specifications in an NPDES permit in order to achieve compliance with water quality standards is not a more stringent requirement than the inclusion of BMP based permit limitations to achieve water quality standards. (State Water Board Order No. WQ 2006-0012 (*Boeing*)). Therefore, consideration of the factors set forth in section a-13241 analysis is not required for permit requirements that implement the effective prohibition on the discharge of non-storm water discharges into the MS4, or for controls to reduce the discharge of pollutants in storm water to the maximum extent practicable, or other provisions that the Regional Water Board has determined appropriate to control such pollutants, as those requirements are mandated by federal law..

Notwithstanding the above, the Regional Water Board has considered the factors set forth in developed an economic analysis of this Order, consistent with California Water Code section 13241 in issuing this Order. That analysis is provided below. The Regional Water Board has also considered all of the evidence that has been presented to the Board regarding the section 13241 factors in adopting this Order. The Regional Water Board finds that the requirements in this Order are reasonably necessary to protect beneficial uses identified in the Basin Plan, and the ~~economic~~ economic information related to costs of compliance and other section 13241 factors are not sufficient to justify failing to protect those beneficial uses. Where appropriate, the Regional Water Board has provided Permittees with additional time to implement control measures to achieve final WQBELs and/or water quality standards.

A. Past, present and probable future beneficial uses of water.

Chapter 2 of the Basin Plan identifies designated beneficial uses for water bodies in the Los Angeles Region, which are the receiving waters for MS4 discharges. Beneficial uses are also identified in the findings of this Order and further discussed relative to TMDLs in section VI.D of this Fact Sheet.

B. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.

Environmental characteristics of each of the Watershed Management Areas covered by this Order, including the quality of water, are discussed in the Region's Watershed Management Initiative Chapter as well as available in State of the Watershed reports and the State's CWA Section 303(d) List of impaired waters.

- ❖ Santa Clara River Watershed Management Area
www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/wmi/santa_clara_river_watershed/santa_clara_river_watershed.doc
- ❖ Santa Monica Bay Watershed Management Area
www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/wmi/santa_monica_bayWMA/santa_monica_bayWMA.doc

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- ❖ Dominguez Channel Watershed Management Area
www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/wmi/dominguez_channelWMA/dominguez_channelWMA.doc
- ❖ Los Angeles River Watershed Management Area
www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/wmi/los_angeles_river_watershed/los_angeles_river_watershed.doc
- ❖ San Gabriel River Watershed Management Area
www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/wmi/san_gabriel_river_watershed/san_gabriel_river_watershed.doc
- ❖ Los Cerritos Channel and Alamitos Bay Watershed Management Area
www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/wmi/los_cerritos_channelWMA/los_cerritos_channelWMA.doc
- ❖ Middle Santa Ana River Watershed Management Area
http://www.waterboards.ca.gov/santaana/water_issues/programs/wmi/index.shtml
<http://www.sawpa.org/watershedinfo.html>

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| The quality of water in major-receiving waters for MS4 discharges has been routinely monitored by Permittees through the Monitoring and Reporting Program under Order No. 01-182. Below are summaries of water quality exceedances reported for the 2010-2011 reporting year.

Summary of Constituents that Did Not Meet Water Quality Objectives at Mass Emission Stations during 2010-2011 for One or More Events

Mass Emission/Watershed	Wet	Dry
Ballona Creek (S01)²	Fecal coliforms ³ pH ⁴ Dissolved zinc	pH ³
Malibu Creek (S02)	Fecal coliforms Cyanide pH ³ Sulfate	Fecal coliforms Sulfate
Los Angeles River (S10)¹	Fecal coliforms ² pH ³ Dissolved zinc Cyanide	Fecal coliforms pH ³
Coyote Creek (S13)	Fecal coliforms ² pH ³ Dissolved zinc	Fecal coliforms
San Gabriel River (S14)	Fecal coliforms ² pH ³	
Dominguez Channel (S28)¹	Fecal coliforms ² Dissolved copper Dissolved zinc	Fecal coliforms pH ³
Santa Clara River (S29)	Fecal coliforms pH ³ Dissolved zinc	

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² More urbanized watersheds.

³ Subject to the fecal coliform water quality objective high-flow suspension (LARWQCB, 2003).

⁴ pH was evaluated outside of holding time.

The following table summarizes the results of an analysis based on evaluation of the 15 sets of dry weather data for the period of 2005 to 2011 for each of the mass emission stations. The most prevalent pollutants of concern among the mass emission stations include fecal coliform bacteria, cyanide, mercury, chloride, sulfate, total dissolved solids, copper, and selenium. Reported results for fecal coliform bacteria, cyanide, copper, and selenium concentrations consistently exceeded water quality objectives in all watersheds. For watersheds where objectives apply for sulfate and total dissolved solids, the receiving water concentrations consistently exceeded the objectives. The incidences where exceedances are indicated for mercury are largely due to analytical detection levels that were higher than the applicable objective.

Summary of LA County Watersheds and Frequency of Receiving Water Exceeding Water Quality Objectives (2005 to 2011 - Dry Season Data Analysis)¹

Parameter	Santa Clara River	Los Angeles River	Dominguez Channel	Ballona Creek	Malibu Creek	San Gabriel River	
						Upper Portion	Lower Portion
pH	0/15	7/15	5/15	3/15	0/15	1/14	2/15
Total Coliform	No FW Objective	No FW Objective)	No FW Objective	No FW Objective	No FW Objective	No FW Objective	No FW Objective
Fecal Coliform	4/15	4/15	10/15	13/15	6/15	11/14	13/15
Enterococcus	No FW Objective	No FW Objective	No FW Objective	No FW Objective	No FW Objective	No FW Objective	No FW Objective
Chloride	15/15	15/15	No Objective	0/15	0/15	14/14	15/15
Dissolved Oxygen	1/15	0/15	0/15	0/15	0/15	1/14	0/15
Nitrate-N	0/15	0/15	No Objective	No Objective	0/15	7/14	No Objective
Nitrite-N	0/15	3/15	No Objective	No Objective	0/15	0/15	No Objective
Methylene Blue Active Substances	4/15	0/15	No Objective	No Objective	0/15	0/14	No Objective
Sulfate	15/15	15/15	No Objective	No Objective	15/15	14/14	15/15
Total Dissolved Solids	15/15	15/15	No Objective	No Objective	13/15	14/14	15/15
Turbidity ²	0/15	2/15	No Objective	No Objective	0/15	0/15	0/15
Cyanide	11/15	14/15	4/15	15/15	3/15	14/14	15/15
Total Aluminum	1/15	2/15	No Objective	No Objective	0/15	1/14	No Objective
Dissolved Copper	0/15	0/15	5/15	0/15	0/15	13/14	0/15
Total Copper	1/15	6/15	11/15	3/15	0/15	13/14	2/15
Dissolved Lead	0/15	0/15	0/15	0/15	0/15	1/14	0/15
Total Lead	0/15	0/15	1/15	1/15	0/15	13/14	0/15
Total Mercury	15/15	14/15	14/15	15/15	15/15	14/14	15/15
Dissolved Mercury	15/15	15/15	15/15	15/15	15/15	14/14	14/14
Total Nickel	0/15	0/15	0/15	0/15	0/15	1/14	0/15
Dissolved Selenium	2/15	2/15	1/15	2/15	6/15	1/15	10/11
Total Selenium	2/15	2/15	1/15	2/15	6/15	1/15	10/11
Dissolved Zinc	0/15	0/15	0/15	0/15	0/15	7/10	0/15
Total Zinc	0/15	0/15	0/1)	0/15	0/15	10/10	0/15

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1. Frequency of exceedance is denoted as number of exceedances/number of dry weather samples evaluated. For example, "2/15" indicates 2 of the 15 samples had analytical results that exceeded the water quality objective for a given parameter.
2. The Basin Plan water quality objective for turbidity for the protection of MUN is the secondary MCL of 5 NTU. The Basin Plan contains additional turbidity objectives expressed as incremental changes over natural conditions. Since inadequate data were available to assess criteria expressed as incremental changes, only the MCL was considered in the analysis.
3. FW means freshwater

C. *Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.*

Since 2001, municipalities both locally and nationally have gained considerable experience in the management of municipal storm water and non-storm water discharges. The technical capacity to monitor storm water and its impacts on water quality has also increased. In many areas, monitoring of the impacts of storm water on water quality has become more sophisticated and widespread. Better information on the effectiveness of storm water controls to reduce pollutant loadings and address water quality impairments is now available. The International Stormwater BMP Database (<http://www.bmpdatabase.org/>) provides extensive information of the performance capabilities of storm water controls. Additionally, the County of Los Angeles conducted a BMP effectiveness study as a requirement of Order No. 01-182.⁵

Generally, improvements in the quality of receiving waters impacted by MS4 discharges can be achieved by reducing the volume of storm water or non-storm water discharged through the MS4 to receiving waters; reducing pollutant loads to storm water and non-storm water through source control/pollution prevention, including operational source control such as street sweeping, public education, and product or materials elimination or substitution; and removing pollutants that have been loaded into storm water or non-storm water before they enter receiving waters, through treatment or diversion to a sanitary sewer. The following factors are generally accepted to affect pollutant concentrations in MS4 discharges⁶:

- Land use
- Climatic conditions
- Season (i.e. for southern California, dry season and winter wet season)
- Percentage imperviousness (in particular, "effective impervious area" or "EIA")
- Rainfall amount and intensity (including seasonal "first-flush" effects)
- Runoff amount
- Watershed size
- Motor vehicle operation
- Aerial deposition

⁵ County of Los Angeles Department of Public Works. "Los Angeles County BMP Effectiveness Study," August 2005.

⁶ Maestre, Alexander and Robert Pitt. "Identification of Significant Factors Affecting Stormwater Quality Using the NSQD" (draft monograph, 2005).

In their 2010-2011 Annual Report, Permittees identified the following storm water and non-storm water pollutant control measures as particularly effective:

- Street sweeping;
- Catch basin cleaning;
- Catch basin inserts
- Trash bins;
- End-of-pipe controls such as low-flow diversions;
- Infiltration controls;
- Erosion controls; and
- Public education and outreach, including multi-lingual strategies.

Permittees summarized the most-used BMPs and most popular BMPs (according to the number of Permittees using a particular BMP) in their 2010-2011 Annual Report. An itemization of all BMPs installed and maintained during the 2010-11 reporting period is provided in Appendices B and C of the Permittees' Annual Report.

Most installed BMPs County-wide During 2010-11

BMP Type	Total Number Installed
Catch Basin Connector Pipe Full Capture (CPS)	6377
Fossil Filter Catch Basin Insert	5968
Automatic Retractable Catch Basin Trash Screen (ARS)	3870
Clean Screen Catch Basin Insert	3767
Extra Trash Can	3681
Covered Trash Bin	3119
Signage and Stenciling	1884
Drain Pac Catch Basin Insert	1625
CulTec Infiltration Systems	1296
Infiltration Trenches	963
Infiltration Pit	958
Abtech Ultra Urban Catch Basin Insert	748
CDS Gross Pollutant Separator	438
United Storm Water Catch Basin Scree Inserts	403
Restaurants Vent Traps	258
Stormceptor Gross Pollutant Separators	211

Most Used Proprietary and Non-Proprietary BMPs During 2010-11

Types of Nonproprietary BMPs Used By Most Permittees		Types Proprietary BMPs Used By Most Permittees	
BMP Type	No. of Cities	BMP Type	No. of Cities
Infiltration Trenches	40	Fossil Filter Catch Basin	46

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		Inserts	
Covered Trash Bins	32	CDS Gross Pollutant Separator	36
Extra Trash Cans	31	Drain Pac Catch Basin Insert	21
Enhanced Street Sweeping	26	Clean Screen Catch Basin Insert	21
Dog Parks	23	Stormceptor Gross Pollutant Separator	19

Some of the many advances in how to effectively control storm water and pollutants in storm water have occurred locally within the Los Angeles Region and include the development of cost effective trash full capture devices, storm water diversion, treatment and beneficial use facilities such as SMURRF and storm water capture, storage, and reuse facilities such as Sun Valley, low impact development/site design practices, and innovative/opportunistic culvert inlet multi-media filters. There are many other case studies of municipalities that have implemented innovative and effective storm water management measures (e.g., Portland, OR).

This Order is designed to reduce pollutant loading to waterbodies within Los Angeles County from discharges to and from the Los Angeles County MS4 through the implementation of multi-faceted storm water management programs at the municipal and watershed levels. Overall improvements in MS4 discharge quality are expected to occur over time with ongoing implementation of the Los Angeles County MS4 Permit. However, currently little information on the quality of storm water in the region and the water quality that can be achieved with the coordinated control of all MS4 discharges through full implementation of all storm water management measures by individual municipalities and collectively by all Permittees within a watershed is available. This Order, however, is designed to effectively focus and broaden monitoring requirements with the addition of outfall monitoring and monitoring associated with the 33 TMDLs being incorporated, so pollutant loading from the MS4 can be better quantified and improvements in water quality resulting from implementation of storm water management measures can be tracked.

D. Economic considerations.

The Regional Water Board recognizes that Permittees will incur costs in implementing this Order above and beyond the costs from the Permittees’ prior permit. Such costs will be incurred in complying with the post-construction, hydromodification, Low Impact Development, TMDL, and monitoring and reporting requirements of this Order. The Regional Water Board also recognizes that, due to California’s current economic condition, many Permittees currently have limited staff and resources to implement actions to address its MS4 discharges. Based on the economic considerations below, the Board has provided

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permittees a significant amount of flexibility to choose how to implement the permit. This Order allows Permittees the flexibility to address critical water quality priorities, namely discharges to waters subject to TMDLs, but aims to do so in a focused and cost-effective manner while maintaining the level of water quality protection mandated by the Clean Water Act and other applicable requirements. For example, the inclusion of a watershed management program option allows Permittees to submit a plan, either individually or in collaboration with other Permittees, for Regional Water Board Executive Officer approval that would allow for actions to be prioritized based on specific watershed needs. The Order also allows Permittees to customize monitoring requirements, which they may do individually, or in collaboration with other Permittees. In the end, it is up to the permittees to determine the effective BMPs and measures needed to comply with this Order. Permittees can choose to implement the least expensive measures that are effective in meeting the requirements of this Order. This Order also does not require permittees to fully implement all requirements within a single permit term. Where appropriate, the Board has provided permittees with additional time outside of the permit term to implement control measures to achieve final WQBELs and/or water quality standards. Lastly, this Order includes several reopener provisions whereby the Board can modify this Order based on new information gleaned during the term of this Order.

Before discussing the economics associated with regulating MS4 discharges, it should be noted that there are instances outside of this Order where the Board previously considered economics. First, when the Board adopted the water quality objectives that serve as the basis for several requirements in this Order, it took economic considerations into account. (See *In re Los Angeles County Municipal Storm Water Permit Litigation* (Sup. Ct. Los Angeles County, March 24, 2005, Case No. BS 080548), Statement of Decision from Phase II Trial on Petitions for Writ of Mandate, p. 21.) Second, ~~The~~ the cost of complying with TMDL wasteload allocations has been previously considered during the adoption of each TMDL. The costs of complying with the water quality based effluent limitations and receiving water limitations derived from the 33 TMDLs, which are incorporated into this Order, are not additive. For example, the costs estimated for compliance with a TMDL for one pollutant in a watershed, such as metals, can be applied to the costs to achieve compliance with a TMDL for another pollutant in the same watershed, such as pesticides, because the same implementation strategies can be used for both pollutants. Several MS4 permittees have recognized this opportunity in the multi-pollutant TMDL implementation plans they have submitted (e.g. Ballona Creek Metals/Bacteria TMDLs and Machado Lake Pesticides/Nutrients TMDLs). In other words, the estimated cost of complying with the Ballona Creek Metals TMDL can apply to metals, pesticides, PCBs, and bacteria. The costs for complying with trash TMDLs are based on different implementation strategies (e.g., full capture devices), but those strategies are effective at removing metals and toxic pollutants as well. Thus, the costs estimated for each TMDL should not be added to determine the cost of compliance with all TMDLs. The staff reports for the various TMDLs include this disclaimer, and also discuss the cost efficiencies that can be achieved by treating multiple pollutants. Further, the Board's considerations of economics in developing each TMDL have often resulted in lengthy implementation schedules to achieve water quality standards. Where appropriate, these implementation schedules have been used to justify compliance schedules in this Order.

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Economic Considerations of Regulating MS4 Discharges

It is very difficult to determine the true cost of implementing storm water and urban runoff management programs because of highly variable factors and unknown level of implementation among different municipalities and inconsistencies in reporting by Permittees. In addition, it is difficult to isolate program costs attributable to permit compliance. Reported costs of compliance for the same program element can vary widely from Permittee to Permittee, often by a very wide margin that is not easily explained. Despite these problems, efforts have been made to identify storm water and urban runoff management program costs, which can be helpful in understanding the costs of program implementation.

Economic considerations of implementing this Order were examined by primarily utilizing the data that are self-reported by the Permittees in their annual reports and a State Water Board funded study, which examined the costs of municipal MS4 programs statewide.⁷ The economic impact to public agencies was tabulated based on the reported costs of implementing the six minimum control measures (Public Information and Participation, Industrial/Commercial Facilities Control, Development Planning, Development Construction, Public Agency Activities, and Illicit Connections and Illicit Discharges Elimination) required by 40 CFR section 122.26(d)(2)(iv) as well as costs associated with program management, monitoring programs, and a category described as other. As noted above, Permittees report wide variability in the cost of compliance, which is not easily explained. Based on reported values, the average annual cost to the Permittees in 2010-11 was \$4,090,876 with a median cost of \$687,633. ~~This translated to an average annual cost per household⁸ of \$120.04 with a median cost of \$57.31 per household.~~

It is important to note that reported program costs are not all solely attributable to compliance with requirements of the LA County MS4 Permit. Many program components, and their associated costs, existed before the first LA County MS4 Permit was issued in 1990. For example, storm drain maintenance, street sweeping and trash/litter collection costs are not solely or even principally attributable to MS4 permit compliance, since these practices have long been implemented by municipalities. Therefore, the true program cost related to complying with MS4 permit requirements is some fraction of the total reported costs. For example, after adjusting the total reported costs by subtracting out the costs for street sweeping and trash collection, the average annual cost to the Permittees was \$2,397,315 with a median cost of \$290,000. ~~This translates to an average annual cost per household of \$42.57 (or \$3.55 per month) with a median annual cost of \$17.89 per household.~~

These results are consistent with the State Water Board funded study ("State Water Board Study") that surveyed the costs to develop, implement, maintain and monitor municipal

⁷ Data from NPDES Stormwater Cost Survey, prepared by the Office of Water Programs, California State University, Sacramento (January 2005) and the Los Angeles County Municipal Storm Water Permit (Order No. 01-182), Unified Annual Stormwater Report, 2010 – 2011, <http://ladpw.org/wmd/npdesrsa/annualreport/>

⁸ Data from the U.S. Census Bureau, 2010, <http://quickfacts.census.gov>.

separate storm sewer system management and control programs in 2004.⁹ The objectives of the study were to: 1) document stormwater program costs and 2) assess alternative approaches to MS4 quality control. The six cities selected for the study were judged by State Water Board staff as having good MS4 management programs, adequate accounting systems, and represented a variety of geographic locations, hydrologic areas, populations and incomes. The cities selected were Corona, Encinitas, Fremont, Fresno-Clovis Metropolitan Area, Sacramento and Santa Clarita. The results found that the annual total cost per household ranged from \$18 to \$46. The average cost was found to be \$35 and the median, \$36. The true mean, which is derived by dividing the total sample costs by the total sample number of households, is \$29 in 2002 dollars. This study was further examined and applied to the Ventura County MS4 Permit in *“Economic Considerations of the Proposed (February 25, 2008) State of California Regional Water Quality Control Board Los Angeles Region, Order 08-xxx, NPDES Permit No. CAS004002, Waste Discharge Requirements for Stormwater (Wet Weather) and Non-Stormwater (Dry Weather) Discharges from the Municipal Separate Storm Sewer Systems within the Ventura County Watershed Protection District, County of Ventura and the Incorporated Cities Therein,”* and found that when adjusted for inflation, the total annual cost to the MS4 Permittees ranged from \$7.15 to \$10.9 million, depending on the averaging method applied. ~~This translated to an annual cost per household that ranged from \$27.60 to \$42.00 in 2008 dollars.~~

The State Water Board Study noted inherent limitations in the cost data quality. The most significant data quality limitation cited is that the costs provided by the municipalities were not sufficiently detailed or referenced to provide opportunity for independent review of the accuracy and completeness of the cost data. Similarly, the costs presented in the Los Angeles County Unified Annual Report (“Unified Annual Report”) are not presented with supporting data or references so that they can be independently reviewed. Some of the limitations of the reported cost data are illustrated by a comparison of monitoring costs in different sections of the Unified Annual Report. In the monitoring costs section, the total costs for monitoring, including sample collection, analytical results, and sampling station maintenance was \$713,409 for 2010-2011. In contrast, the same report showed the monitoring costs of \$9,008,460 in the Unified Cost Table. Absent further explanation in the Unified Annual Report, this suggests that the reported costs may not be reliable.

The State Water Board Study also found that certain stormwater implementation costs included activities that provide separate and additional municipal benefits such as street sweeping and storm drain and channel cleaning. The State Water Board Study indicated that the inclusion of these costs as stormwater implementation costs is not uniform across different municipalities. In order to assess the variability of costs reported by different municipalities under the same permit and determine if Los Angeles County MS4 Permittees are reporting costs for activities that provide municipal benefits beyond storm water management and permit compliance, Regional Water Board staff reviewed costs reported by Los Angeles County MS4 Permittees in the Unified Annual Report. The reported storm water costs range from \$11.45 to \$928.10 per household per year. The average reported cost was \$120.04 per household per year and the median cost was \$57.31 per household

⁹ Currier, Brian K., Joseph M. Jones, Glenn L. Moeller. “NPDES Stormwater Cost Survey, Final Report”, Prepared for California State Water Resources Control Board, California State University Sacramento, Office of Water Programs, January, 2005.

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per year. The wide spread of annual costs and the significant difference between the mean and median costs indicate that the LA County MS4 Permittees are not reporting costs in a uniform manner.

Board Staff also reviewed available cost data in the Unified Annual Report for Permittees that provided separate costs regarding street sweeping and trash collection. Staff adjusted the total costs so that the costs for these multi-benefit municipal programs were not included in the storm water cost and found that the adjusted storm water costs were greatly reduced by excluding these activities. These adjusted costs ranged from \$0.00 per household per year to \$903.10 per household per year. The mean adjusted rate is \$42.57 per household per year and the median adjusted rate is \$17.89 per household per year. Clearly, a significant portion (greater than 50%) of the costs attributed to storm water compliance activities also provide additional municipal benefits. (In the case of the Los Angeles County MS4 Permittees, some municipalities reported costs for trash collection; these costs were not reported by municipalities in the State Water Board Study.)

Finally, Board staff reviewed the cost breakdowns reported in the State Water Board Study and the Unified Annual Report for Los Angeles County MS4 Permittees. The following table summarizes the results:

Cost Category	State Water Board Study	Los Angeles County (2010-2011)
Watershed Management	6%	5%
Construction	11%	1%
Illicit Discharge	4%	2%
Industrial and Commercial	8%	1%
Overall Management	37%	5%
Pollution Prevention	2%	2%
Post Construction	3%	
Public Education	13%	2%
Monitoring	16%	3%
BMP Maintenance	Not Reported	2%
Development	Not Reported	1%
Other	Not reported	76%

The reported costs show differences between the MS4 Permittees surveyed in the State Water Board Study and the Los Angeles County MS4 Permittee costs in the following categories: construction, industrial and commercial activities, public education and monitoring. These categories all show greater proportional statewide cost allocations relative to the cost allocations by the Los Angeles County MS4 Permittees. The Los Angeles County MS4 Permittees report a cost category of BMP maintenance, which is not defined in the State Water Board Study. The management costs in the State Water Board Study were greater than the management costs reported by the Los Angeles County MS4 Permittees, but the Los Angeles County MS4 Permittees also reported a category of "Other" that accounted for a large proportion of costs, which is not defined in the Unified Annual Report.

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The State Water Board Study found that cost information is crucial in making management decisions regarding storm water requirements. The report also recommends that annual reports required under MS4 permits throughout the State follow a standard format for cost reporting and that costs for all MS4 program activities (per program area) should be identified as existing, enhanced or new according to the extent that the activity was required under the previous permit, is enhanced by the permit, or is exclusively a result of compliance efforts with new provisions of the MS4 permit.

Further, there is an element of cost consideration inherent in the maximum extent practicable (MEP) standard. While the term “maximum extent practicable” is not specifically defined in the Clean Water Act or its implementing regulations, USEPA, courts, and the State Water Board have addressed what constitutes MEP. MEP is not a one-size fits all approach. Rather, MEP is an evolving, flexible, and advancing concept, which considers practicability. This includes technical and economic practicability. Compliance with the MEP standard involves applying BMPs that are effective in reducing or eliminating the discharge of pollutants in storm water to receiving waters. BMP development is a dynamic process, and the menu of BMPs may require changes over time as experience is gained and/or the state of the science and art progresses. MEP is the cumulative effect of implementing, evaluating, and making corresponding changes to a variety of technically appropriate and economically practicable BMPs, ensuring that the most appropriate controls are implemented in the most effective manner. The State Water Board has held that “MEP requires permittees to choose effective BMPs, and to reject applicable BMPs only where other effective BMPs will serve the same purpose, the BMPs would not be technically feasible, or the costs would be prohibitive.” (State Water Board Order WQ 2000-11.)

In addition to considering the costs of storm water management, it is important to consider the benefits of storm water and urban runoff management programs. A recent study conducted by USC/UCLA assessed the costs and benefits of implementing various approaches for achieving compliance with the MS4 permits in the Los Angeles Region. The study found that non-structural systems would cost \$2.8 billion but provide \$5.6 billion in benefit. If structural systems were determined to be needed, the study found that total costs would be \$5.7 to \$7.4 billion, while benefits could reach \$18 billion.¹⁰ Costs are anticipated to be borne over many years. As can be seen, the benefits of the programs are expected to considerably exceed their costs. Such findings are corroborated by USEPA, which found that the benefits of implementation of its Phase II storm water rule would also outweigh the costs.¹¹

Economic considerations of Not Regulating MS4 Discharges.

Economic discussions of storm water and urban runoff management programs tend to focus on costs incurred by municipalities in developing and implementing the programs. This is appropriate, and these costs are significant and a major issue for the Permittees. However, in adopting Order WQ 2000-11, the State Water Board further found that in considering the cost of compliance, it is also important to consider the costs of impairment;

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¹⁰ LARWQCB, 2004. Alternative Approaches to Stormwater Control.

¹¹ Federal Register / Vol. 64, No. 235 / Wednesday, December 8, 1999 / Rules and Regulations. P. 68791.

that is, the negative impact of pollution on the economy and the positive impact of improved water quality. For example, economic benefits may result through program implementation, and alternative costs (as well as environmental impacts) may be incurred by not fully implementing the program. So, while it is appropriate and necessary to consider the cost of compliance, it is also important to consider the alternative costs incurred by not fully implementing the programs, as well as the benefits which result from program implementation.

The benefits of implementation of the Los Angeles County MS4 Permit include improvements in water quality, enhancement of beneficial uses, and increased employment, income and satisfaction from environmental amenities. Most of the benefits of this permit can be identified and, in some cases, quantified in monetary terms. Others cannot be expressed in dollar terms and can only be described. For example, household willingness to pay for improvements in fresh water quality for fishing and boating has been estimated by USEPA¹² to be \$158-210.62. This estimate can be considered conservative, since it does not include important considerations such as marine waters benefits, wildlife benefits, or flood control benefits. The California State University, Sacramento study corroborates USEPA's estimates, reporting annual household willingness to pay for statewide clean water to be \$180.63.¹³ When viewed in comparison to household costs of existing urban runoff management programs, these household willingness to pay estimates exhibit that per household costs incurred by Permittees to implement their urban runoff management programs remain reasonable.

Not regulating discharges from the Los Angeles County MS4 will result in greater pollution of rivers, streams, lakes, reservoirs, bays, harbors, estuaries, groundwater, coastal shorelines and wetlands. Urban runoff in southern California has been found to cause illness in people bathing near storm drains.¹⁴ A study of south Huntington Beach and north Newport Beach found that an illness rate of about 0.8% among bathers at those beaches resulted in about \$3 million annually in health-related expenses.¹⁵ In addition, poor beach water quality negatively affects tourism, which in turn reduces revenues to local businesses.

Funding Sources.

Public agencies (both federal and state) recognize the importance of storm water improvement projects and have provided significant sources of funding through grants, bonds, and fee collections to help offset the costs of storm water management in Los Angeles County. The table below summarizes the funds that have been allocated to storm water management in Los Angeles County, to date.

Source of Money	Dollars	% of total costs funded by State (only for those
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¹² Federal Register / Vol. 64, No. 235 / Wednesday, December 8, 1999 / Rules and Regulations. P. 68793.
¹³ State Water Board, 2005. NPDES Stormwater Cost Survey. P. iv.
¹⁴ Haile, R.W., et al, 1996. An Epidemiological Study of Possible Adverse Health Effects of Swimming in Santa Monica Bay. Santa Monica Bay Restoration Project.
¹⁵ Los Angeles Times, May 2, 2005. Here's What Ocean Germs Cost You: A UC Irvine Study Tallies the Cost of Treatment and Lost Wages for Beachgoers Who Get Sick.

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		projects which included State funding)
Only State Board-awarded funding (Propositions 12, 13, 40, 50, and 84; and federal money, 319h, 205j, ARRA)	\$49,143,132	47%
Only State money from any State agency (propositions only, no federal); includes State Board, DWR, Coastal Conservancy, Fish & Game	\$67,461,699	58%
Total costs (approx.) for projects involving State money	\$114,703,731	N/A
Prop A	\$4,981,772	N/A
Prop O	\$508,678,258	N/A
Measure V	\$9,107,959	N/A
Total Public Funds (federal, State, local bonds and measures) expended on stormwater control projects	\$645,389,932	N/A (information not available for projects funded by local bonds and measures)

In addition to current funding options, future funding options continue to be created. Assembly Bill 2554, known as the Los Angeles County Flood Control District's Water Quality Funding Initiative, is currently awaiting under consideration by the LACFCD's Board of Supervisors. If the Board of Supervisors approve the fee proposal and no majority protest is received, then it will be submitted for voter approval and ~~c~~would create an estimated annual revenue of \$300 million ~~earmarked to be utilized for various storm water projects including but not limited to:~~

- New and Existing Water Quality Projects and Programs
- Maintenance of Existing Facilities
- TMDL and MS4 Permit Implementation

Of the ~~estimated annual revenue of \$300M, 40%~~forty percent of the money would be returned to the municipalities to create new local projects and programs and maintenance. Below are the estimated revenues that would be allocated to certain municipalities based on the estimated annual revenue of \$300 million.

Municipalities	Estimated Annual Revenue
City of Los Angeles	\$37 million
City of Santa Monica	\$1 million
El Segundo	\$600,000
Manhattan Beach	\$300,000
Redondo Beach	\$750,000
Unincorporated Areas on Los Angeles County	\$15 million

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Fifty percent of the ~~\$300M~~ annual revenue would be spread across nine watershed authority groups (WAGs) to develop Water Quality Improvement Plans and implement regional projects and programs. Some examples of the possible annual revenues available to the WAGs are provided below:

WAG	Estimated Revenue
Santa Monica Bay	\$12 million
Upper Los Angeles River	\$36 million
Lower Los Angeles River	\$15 million
Upper San Gabriel River	\$17 million

The remaining ~~40%~~ ten percent of the annual revenues ~~is~~ would be allocated to the Los Angeles County Flood Control District for administration of the program and other district water quality projects and programs.

E. Need for developing housing within the region.

For over 100 years, this region has relied on imported water to meet many of our water resource needs. Imported water makes up approximately 70 to 75% of the Southern California region’s water supply, with local groundwater, local surface water, and reclaimed water making up the remaining 25 to 30%.¹⁶ The area encompassed by this Order imports approximately 50% of its water supply. The Los Angeles County MS4 permit helps address the need for housing by controlling pollutants in MS4 discharges, which will improve the quality of water available for recycling and re-use. This in turn may reduce the demand for imported water thereby increasing the region’s capacity to support continued housing development.

A reliable water supply for future housing development is required by law, and with less imported water available to guarantee this reliability, an increase in local supply is necessary.

In this Order, the Regional Water Board supports integrated water resources approaches. An integrated water resources approach manages water resources by integrating wastewater, stormwater, recycled water, and potable water planning through the capture and beneficial use of stormwater. An integrated approach can preserve local groundwater resources and reduce imported water needs. Thus, complying with this Order can positively affect the need for developing housing in the region. Furthermore, the low impact development (LID) requirements of this MS4 permit emphasize the necessity to balance growth with the protection of water quality. LID emphasizes cost effective, lot-level strategies that replicate the natural hydrology of the site and reduces the negative impacts of development. By avoiding the installation of more costly conventional storm water management strategies and harnessing runoff at the source, LID practices enhance the environment while providing cost savings to both developers and local governments.

F. Need to develop and use recycled water.

¹⁶ Southern California Association of Governments. The State of the Region 2007 Measuring Regional Progress (Housing, Environment). December 6, 2007. <http://www.scaq.ca.gov/publications/index.htm>.

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Storm water runoff that travels across the urban landscape quickly becomes contaminated with the wastes inherent from urban living. This polluted water is then discharged to the surface waters and eventually the ocean where it wreaks havoc on the natural coastal ecosystem and impacts human health. If the storm water is captured and treated (or captured prior to contamination) a new resource could be added to local water supplies. If this water is more effectively harnessed and recycled, numerous benefits could be achieved. These include:

- Regional reduction on imported water;
- Aid in the restoration of area aquifers;
- Reduction in the need for extensive public works projects; and
- Improvement in the quality of impaired water bodies.

The exact volume of storm water available for capture is dependent on the intensity and duration of storm events. Looking at land uses across the region and applying land use-specific runoff coefficients, the annual average runoff in the Los Angeles subarea is 450,000 acre-feet/year (with an average annual rainfall of 15.5 inches). The Los Angeles and San Gabriel Rivers Watershed Council estimates that, on average, about 550,000 acre-feet/year of runoff are discharged from Los Angeles area to the ocean.¹⁷

It is not possible to capture all MS4 discharges; however, a significant portion could be put to beneficial use. Potentially, in Los Angeles, “[i]f we could capture 80% of the rainfall that falls on just a quarter of the urban area-15% of the total watershed-we would be reducing total runoff by approximately 30%. That translates into a diversion of 43 billion gallons of water per year (132,000 acre-feet) or enough to supply 800,000 people for a year.”¹⁸ That water capture would render a savings of almost sixty million dollars of imported State Water Project water. Capturing storm water from a larger portion of the watershed could increase the volume of this “new” water even further. Unlike traditional recycled water that requires the installation of dual plumbing and intensive infrastructure, much of the storm water capture could be done with minimal infrastructure retrofits in established communities.

Larger projects (and the corresponding savings) are also possible. The County of Los Angeles recharges storm water already. While the scale of these recharge activities is limited compared to the volume of water potentially available to recharge, the value of the process is significant. For example, in 2000 “County conservation efforts captured 220,000 acre-feet of local storm water runoff that was valued at \$80 million dollars.”¹⁹

The unknown effects of infiltrating stormwater to recharge ground water have created some concern that such activities could introduce pollutants to the water supply. However, the U.S. Bureau of Reclamation has found²⁰:

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¹⁷ http://www.lasgrwc.org/WAS/WASflyer_web.pdf

¹⁸ Los Angeles and San Gabriel River Watershed Council. 1999. *Stormwater: asset not liability*.

¹⁹ Los Angeles County Department of Regional Planning. 2008. 2008 Draft General Plan- Planning Tomorrow’s Great Places.

²⁰ Los Angeles and San Gabriel River Watershed Council. 2010. *Water Augmentation Study: Research, Strategy, and Implementation Report*.

“Based on the findings of the WAS research, decentralized stormwater management would provide a local and reliable supply of water that would not negatively impact groundwater quality. A decentralized approach could contribute up to 384,000 acre-feet of additional groundwater recharge annually if the first ¾” of each storm is infiltrated on all parcels, enough to provide water annually to approximately 1.5 million people. The value of this new water supply would be approximately \$311 million, using the MWD Tier 2 rate for 2010.”

Recent studies in the Los Angeles area have also shown that in the process of infiltration through the soil, many contaminants are removed with no immediate impacts, and no apparent trends to indicate that storm water infiltration will negatively impact groundwater.²¹ In areas with groundwater contamination issues, utilizing recycled storm water to recharge the aquifers may actually aid in the dilution of the buildup of salts. The value of this is hard to quantify but is an additional benefit. The use of recycled water can be accomplished in direct (such as irrigation projects or dual plumbing fixtures) or indirect (such as infiltration) ways. Both direct and indirect methods can be completed on a variety of different scales. To maximize the benefits available from using recycled water, the direct and indirect projects will need to be completed on household, neighborhood, watershed and regional scales. Currently there are a limited (but growing) number of projects in the region that can serve as examples of what may be accomplished through the development and implementation of recycled water projects. The Los Angeles County MS4 permit addresses the need for recycled water by controlling pollutants in storm water, which will result in water of improved quality with a greater potential for recycling or beneficial use. State law and policy advocates greatly expanding the use of recycled water to help meet local demand and reduce the volumes of water that are imported from other regions. Increased utilization of recycled water will require looking beyond the traditional reclaimed wastewater and will require utilizing storm water that is wasted by conveyance in the MS4 and dumping into the ocean. Storm water capture and use has not traditionally been included in the discussion of water recycling, but the process meets the definitional constraints and is bound by the same limitations and boundaries.

In addition, there are a number of Total Maximum Daily Loads (TMDLs) developed by the Regional Water Board that incorporate recycled water programs as potential implementation actions to meet TMDL requirements. These potential actions focus on both traditional water recycling and the newer storm water recycling approaches. Such recycled water programs could also reduce reliance on potable water supplies by expanding water recycling and aiding in the reclamation of poor quality, unconfined groundwater supplies. The capture, treatment and use of stormwater could augment these techniques as well. On-site capture of storm water helps prevent the water from being contaminated by urban by-products to begin with and the use of this high quality resource could reduce the unnecessary use of potable water for non-potable needs.

Some great examples of onsite capture are being demonstrated by TreePeople²² who have demonstration projects ranging from small scale rainwater harvesting at the single family home locations, to large scale watershed projects at Tuxedo Green in Sun Valley where the

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²¹ Los Angeles and San Gabriel River Watershed Council. 2005. Los Angeles Basin Water Augmentation Study Phase II Final Report.

²² www.treepeople.org

project redesigned the intersection with a flood control system that conveys most stormwater under, instead of into, the busy intersection. The water is stored in a 45,000-gallon cistern to be used for irrigating the landscaping at the new pocket park, which is planted with native and drought-tolerant species.

Another state of the art project was implemented by the City of Santa Monica called the Santa Monica Urban Runoff Recycling Facility (SMURFF).²³ The project harnesses the urban runoff (primarily during the dry season) and treats it for various pollutants to create a source of high quality water for reuse in landscape irrigation. Because the facility captures the dry weather runoff before it reaches the Santa Monica Bay it decreases a significant amount of pollutants from negatively impacting the Bay and associated beaches. The SMURFF is also open to the public and has several exhibits to raise public awareness of Santa Monica Bay pollution and the role of each individual in the watershed's health.

The County of Los Angeles Department of Public Works, Watershed Management Division has targeted the Sun Valley Watershed "...to solve the local flooding problem while retaining all storm water runoff from the watershed, increasing water conservation, recreational opportunities, wildlife habitat, and reducing stormwater pollution."²⁴ This aggressive plan involves several stakeholders and has implemented a variety of on-site BMPs as well as storm water infiltration retrofits and diversions.

XV. UNFUNDED STATE MANDATES

Article XIII B, Section 6(a) of the California Constitution provides that whenever "any state agency mandates a new program or higher level of service on any local government, the state shall provide a subvention of funds to reimburse that local government for the costs of the program or increased level of service." The requirements of this Order do not constitute state mandates that are subject to a subvention of funds for several reasons, including, but not limited to, the following.

First, the requirements of this Order do not constitute a new program or a higher level of service as compared to the requirements contained in the previous permit, Order No. 01-182 (as amended). The overarching requirement to impose controls to reduce the pollutants in discharges from MS4s is dictated by the Clean Water Act and is not new to this permit cycle. (33 U.S.C. §1342(p)(3)(B).) The inclusion of new and advanced measures as the MS4 programs evolve and mature over time is anticipated under the Clean Water Act (55 Fed. Reg. 47990, 48052 (Nov. 16, 1990)), and these new and advanced measures do not constitute a new program or higher level of service.

Second, and more broadly, mandates imposed by federal law, rather than by a state agency, are exempt from the requirement that the local agency's expenditures be reimbursed. (Cal. Const., art. XIII B, §9, subd. (b).) This Order implements federally mandated requirements under the Clean Water Act and its requirements are therefore not subject to subvention of funds. This includes federal requirements to effectively prohibit

²³ <http://c0133251.cdn.cloudfiles.rackspacecloud.com/Case%20Study%20-%20Santa%20Monica%20Urban%20Runoff%20Recycling%20Facility%20SMURFF.pdf>
²⁴ http://www.sunvalleywatershed.org/watershed_management_plan/wmp-0ES.pdf

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non-storm water discharges, to reduce the discharge of pollutants to the maximum extent practicable, and to include such other provisions as the Administrator or the State determines appropriate for the control of such pollutants. (30 U.S.C. §1342(p)(3)(B).) Federal cases have held these provisions require the development of permits and permit provisions on a case-by-case basis to satisfy federal requirements. (*Natural Resources Defense Council, Inc. v. U.S. E.P.A.* (9th Cir. 1992) 966 F.2d 1292, 1308, fn. 17.) The authority exercised under this Order is not reserved state authority under the Clean Water Act’s savings clause (cf. *Burbank v. State Water Resources Control Bd.* (2005) 35 Cal.4th 613, 627-628 [relying on 33 U.S.C. § 1370, which allows a state to develop requirements which are not “less stringent” than federal requirements]), but instead is part of a federal mandate to develop pollutant reduction requirements for municipal separate storm sewer systems. To this extent, it is entirely federal authority that forms the legal basis to establish the permit provisions. (See, *City of Rancho Cucamonga v. Regional Water Quality Control Bd.-Santa Ana Region* (2006) 135 Cal.App.4th 1377, 1389; *Building Industry Ass’n of San Diego County v. State Water Resources Control Bd.* (2004) 124 Cal.App.4th 866, 882-883.)

The maximum extent practicable standard is a flexible standard that balances a number of considerations, including technical feasibility, cost, public acceptance, regulatory compliance, and effectiveness. (*Building Ind. Asso., supra*, 124 Cal. App.4th at pp. 873, 874, 889.) Such considerations change over time with advances in technology and with experience gained in storm water management. (55 Fed.–Reg. 47990, 48052 (Nov. 16, 1990).) Accordingly, a determination of whether the conditions contained in this Order exceed the requirements of federal law cannot be based on a point by point comparison of the permit conditions and the six minimum control measures that are required “at a minimum” to reduce pollutants to the maximum extent practicable and to protect water quality (40 CFR §_122.34). Rather, the appropriate focus is whether the permit conditions, as a whole, exceed the maximum extent practicable standard. In recent months, the County of Los Angeles and County of Sacramento Superior Courts have granted writs setting aside decisions of the Commission on State Mandates that held that certain requirements in Phase I permits constituted unfunded mandates. In both cases, the courts found that the correct analysis in determining whether a MS4 permit constituted a state mandate was to evaluate whether the permit as a whole -- and not a specific permit provision -- exceeds the maximum extent practicable standard. (*State of Cal. v. Comm. on State Mandates* (Super. Ct. Sacramento County, 2012, No. 34-2010-80000604), *State of Cal. v. County of Los Angeles* (Super. Ct. Los Angeles County, 2011, No. BS130730).)

The requirements of the Order, taken as a whole rather than individually, are necessary to reduce the discharge of pollutants to the maximum extent practicable and to protect water quality. The Regional Water Board finds that the requirements of the Order are practicable, do not exceed federal law, and thus do not constitute an unfunded mandate. These findings are the expert conclusions of the principal state agency charged with implementing the NPDES program in California. (Cal. Wat. Code, §§_13001, 13370.)

It should also be noted that the provisions in this Order to effectively prohibit non-storm water discharges are also mandated by the Clean Water Act. (33 U.S.C. § 1342(p)(3)(B)(ii).) Likewise, the provisions of this Order to implement total maximum daily loads (TMDLs) are federal mandates. The Clean Water Act requires TMDLs to be developed for water bodies that do not meet federal water quality standards. (33 U.S.C. §

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1313(d).) Once the USEPA or a state establishes or adopts a TMDL, federal law requires that permits must contain effluent limitations consistent with the assumptions and requirements of any applicable waste load allocation in a TMDL. (40 CFR § 122.44(d)(1)(vii)(B).)

Third, the local agency Permittees’ obligations under this Order are similar to, and in many respects less stringent than, the obligations of non-governmental dischargers who are issued NPDES permits for storm water discharges. With a few inapplicable exceptions, the Clean Water Act regulates the discharge of pollutants from point sources (33 U.S.C. § 1342) and the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) regulates the discharge of waste (Cal. Wat. Code, § 13263), both without regard to the source of the pollutant or waste. As a result, the “costs incurred by local agencies” to protect water quality reflect an overarching regulatory scheme that places similar requirements on governmental and non-governmental dischargers. (See *County of Los Angeles v. State of California* (1987) 43 Cal.3d 46, 57-58 [finding comprehensive workers compensation scheme did not create a cost for local agencies that was subject to state subvention].)

The Clean Water Act and the Porter-Cologne Act largely regulate storm water with an even hand, but to the extent there is any relaxation of this even-handed regulation, it is in favor of the local agencies. Generally, the Clean Water Act requires point source dischargers, including discharges of storm water associated with industrial or construction activity, to comply strictly with water quality standards. (33 U.S.C. § 1311(b)(1)(C), *Defenders of Wildlife v. Browner* (1999) 191 F.3d 1159, 1164-1165 [noting that industrial storm water discharges must strictly comply with water quality standards].) As discussed in prior State Water Resources Control Board decisions, certain provisions of this Order do not require strict compliance with water quality standards. (SWRCB Order No. WQ 2001-15, p. 7.) Those provisions of this Order regulate the discharge of waste in municipal storm water under the Clean Water Act MEP standard, not the BAT/BCT standard that applies to other types of discharges. These provisions, therefore, regulate the discharge of waste in municipal storm water more leniently than the discharge of waste from non-governmental sources.

Fourth, the Permittees have requested permit coverage in lieu of compliance with the complete prohibition against the discharge of pollutants contained in Clean Water Act section 301, subdivision (a) (33 U.S.C. § 1311(a)). To the extent that the local agencies have voluntarily availed themselves of the permit, the program is not a state mandate. (*Accord County of San Diego v. State of California* (1997) 15 Cal.4th 68, 107-108.)

Fifth, the local agencies’ responsibility for preventing discharges of waste that can create conditions of pollution or nuisance from conveyances that are within their ownership or control under state law predates the enactment of Article XIII B, Section (6) of the California Constitution.

Finally, even if any of the permit provisions could be considered unfunded mandates, under Government Code section 17556, subdivision (d), a state mandate is not subject to reimbursement if the local agency has the authority to charge a fee. The local agency Permittees have the authority to levy service charges, fees, or assessments sufficient to pay for compliance with this Order subject to certain voting requirements contained in the

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California Constitution. (See California Constitution XIII D, section 6, subdivision (c); see also *Howard Jarvis Taxpayers Association v. City of Salinas* (2002) 98 Cal. App. 4th 1351, 1358-1359.). Additional fee authority has recently been established through amendments to the Los Angeles County Flood Control Act (Chapter 755 of the Statutes of 1915, as amended by Assembly Bill 2554 (2010)) to provide funding for municipalities, watershed authority groups, and the LACFCD to initiate, plan, design, construct, implement, operate, maintain, and sustain projects and services to improve surface water quality and reduce storm water and non-storm water pollution in the LACFCD, which may will directly support Permittees' implementation of the requirements in this Order. The Fact Sheet demonstrates that numerous activities contribute to the pollutant loading in the municipal separate storm sewer system. Local agencies can levy service charges, fees, or assessments on these activities, independent of real property ownership. (See, e.g., *Apartment Ass'n of Los Angeles County, Inc. v. City of Los Angeles* (2001) 24 Cal.4th 830, 842 [upholding inspection fees associated with renting property].) The authority and ability of a local agency to defray the cost of a program without raising taxes indicates that a program does not entail a cost subject to subvention. (*Clovis Unified School Dist. v. Chiang* (2010) 188 Cal. App.4th 794, 812, quoting *Connell v. Superior Ceourt* (1997) 59 Cal.App.4th 382, 401; *County of Fresno v. State of California* (1991) 53 Cal.3d 482, 487-488.)

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XVI. PUBLIC PARTICIPATION

Regional Water Board staff held a kick-off meeting on May 25, 2011 to discuss the preliminary schedule for permit development; identify potential alternative permit structures; and outline some of the major technical and policy aspects of permit development. All LA County MS4 Permittees, as well as other known interested stakeholders, were invited to attend. Ninety-five individuals attended the meeting, representing most of the permittees as well as environmental organizations. After a presentation by Board staff, Permittees and interested persons had an initial opportunity to ask questions of staff, raise concerns, and provide feedback.

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At the May 25, 2011 kick-off meeting, Board staff requested input from the attendees on various permit structures. In order to solicit more focused input from permittees on alternative permit structures, and per suggestions at the kick-off meeting, Board staff developed and distributed an on-line survey to permittees using the on-line survey tool, SurveyMonkey®. The survey was distributed to all Los Angeles County MS4 Permittees on June 14, 2011 and responses were requested within two weeks. Fifty-two permittees responded using the on-line survey tool. The on-line survey sought input on several options for permit structure, including an individual permit for each municipality, a single permit for all permittees (i.e., the existing permit structure), and a single or multiple watershed-based permits.

Regional Water Board staff also held three topical workshops on December 15, 2011, January 23, 2012, and March 1, 2012. At the December 2011 workshop, staff discussed and invited feedback on: tentative permit requirements for the "minimum control measures" that comprise Permittees core storm water management program, approaches to addressing non-storm water MS4 discharges, and options for flexibility in permit requirements to address watershed priorities. At the January 2012 workshop, staff discussed and invited feedback on: tentative permit requirements to implement TMDL

waste load allocations assigned to MS4 discharges and monitoring and reporting requirements for this Order. At the March 2012 workshop, staff discussed the use of water quality-based effluent limitations in this Order, discussed a revised proposal for monitoring requirements based on comments from the January 2012 workshop, and provided additional detail on proposed minimum control measure requirements.

Three Regional Water Board workshops were held during regularly scheduled Board meetings on November 10, 2011, April 5, 2012, and May 3, 2012. At the November 2011 Board workshop, staff discussed the objectives for the new permit, the status and schedule for permit development, alternatives for permit structure, provisions to implement TMDL WLAs, and provisions for minimum control measures, and identified preliminary considerations related to provisions for non-storm water discharges, receiving water limitations, water quality-based effluent limitations, and requirements for monitoring and reporting.

Prior to the April 5, 2012 Board workshop, staff released complete working proposals of the permit provisions related to two key parts of this Order: the storm water management program “minimum control measures” and the non-storm water MS4 discharge prohibitions on March 21, 2012 and March 28, 2012, respectively. Staff provided Permittees and interested persons the opportunity to submit written and oral comments over a period of three weeks for early consideration by staff prior to the release of the tentative Order. At the April 2012 Board workshop, staff presented the working proposals and the Board invited public comments. Detailed comments were made on both working proposals, and in particular, comments were made on how to address “essential” non-storm water discharges from potable water supplies and fire fighting activities in this Order.

Prior to the May 3, 2012 Board workshop, staff released complete working proposals of the permit provisions related to three other key parts of this Order: provisions for watershed management programs, TMDL-related requirements, and receiving water limitations language. Staff provided Permittees and interested persons the opportunity to submit written and oral comments over a period of three weeks for early consideration by staff prior to the release of the tentative Order. At the May 2012 Board workshop, staff presented the three working proposals and the Board invited public comments. Staff answered extensive questions from Board members following public comments.

In addition to staff and Board workshops, Regional Water Board staff met regularly with Permittees, including the LA Permit Group (a coalition of 62 of the 86 Permittees covered by this Order), the Los Angeles County Flood Control District and the County of Los Angeles, the City of Los Angeles, and interested environmental organizations including Heal the Bay, Santa Monica Baykeeper, and the Natural Resources Defense Council (NRDC). Staff also met on several occasions with other affected agencies including large public water suppliers (Los Angeles Department of Water and Power and Metropolitan Water District), small community water suppliers, and local fire departments.

Finally, staff hosted several “joint” meetings to bring together key leaders among the Permittees and environmental organizations to discuss significant issues and work towards consensus on these issues where possible. The first two of these were held on May 17, 2012 and May 31, 2012, during which the group discussed permit requirements for USEPA

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established TMDLs. Staff prepared a working proposal based on the areas of agreement from the May 17th joint meeting, and distributed the proposal for review prior to the second meeting on May 31st. The proposal was discussed and refined at the second meeting. A third meeting ~~is scheduled for~~ was held on June 14, 2012.

Prior to the Board's consideration of this Order, the Regional Water Board notified the Permittees and all interested agencies and persons of its intent to hold a hearing to issue an NPDES permit for discharges from the Los Angeles County MS4 and provided them with an opportunity to submit written comments over a 45-day period. The procedures followed for submission of written comments are described in the Notice of Hearing and Opportunity to Comment published for this Order. Notification was provided through the Regional Water Board's website, the Regional Water Board's e-mail subscription service, and the LA Times. After releasing the tentative permit for public review, the Regional Water Board held a staff level workshop on July 9, 2012 to answer questions regarding the tentative permit. A Board member field tour of portions of the MS4 in the San Gabriel Valley was held on July 31, 2012.

The Regional Water Board held a public hearing on the tentative Order during its regular Board meeting on ~~September 6-7~~ October 4-5, 2012. The Regional Water Board continued the public hearing at its next regular Board meeting on November 8, 2012. Permittees and interested persons were invited to attend. At the public hearing, the Regional Water Board heard testimony and comments pertinent to the discharge and this Order. The hearing procedures followed by the Regional Water Board are described in the Notice of Hearing and Opportunity to Comment published for this Order.

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Sent: Friday, October 26, 2012 3:07 PM
To: Kelley, Sandra@Waterboards
Cc: Purdy, Renee@Waterboards
Subject: : Notice of Availability of Responses to Comments on Tentative Permit for MS4 Discharges Within the Coastal Watersheds of Los Angeles County

All responses to comments received on the June 6, 2012 Tentative NPDES Permit for MS4 Discharges Within the Coastal Watersheds of Los Angeles County are now available on the Regional Board's website at http://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/index.shtml

Renee Purdy, Chief
Regional Programs Section
Los Angeles Regional Water Quality Control Board
(213) 576-6622

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California Regional Water Quality Control Board, Los Angeles Region
Los Angeles County MS4 Permit
Response to Comments on the Tentative Order
NON-STORMWATER DISCHARGES MATRIX

Section/Topic	Comment Summary	Commenter(s)	Response	Change Made
<i>Prohibition of Non-Storm Water Discharges</i>				
Definition	The definition of “stormwater” includes “dry weather” runoff, as well as precipitation events. Any attempt to redefine the term “stormwater” to exclude dry weather is contrary to law.	Signal Hill	<p>The definition of “storm water” appropriately excludes “dry weather” runoff. The definition of “storm water” in the permit is consistent with USEPA’s regulations, which define “storm water” as “storm water runoff, snow melt runoff, and surface runoff and drainage.” (40 C.F.R. § 122.26(b)(13).) While “surface runoff and drainage” is not defined in federal law, USEPA’s preamble to the federal regulations demonstrates that the term is limited to the types of runoff that are the result of precipitation events, such as rain and/or snowmelt. (55 Fed. Reg. 47990, 47995-96 (Nov. 16, 1990).) USEPA also specifically rejected the notion that “storm water,” as defined at 40 CFR section 122.26(b)(13), includes dry weather flows. In its preamble to the regulations, USEPA stated: “In response to the comments [on the proposed rule] which requested EPA to define the term ‘storm water’ broadly to include a number of classes of discharges which are not in any way related to precipitation events, EPA believes that this rulemaking is not an appropriate forum for addressing the appropriate regulation under the NPDES program of such non-storm water discharges Consequently, the final definition of storm water has not been expanded from what was proposed.” (55 Fed. Reg. 47990, 47995-96.)</p> <p>Contrary to the commenter’s insinuation, “storm water” does not include any water that flows into storm drains that is incident to urban living. The commenter repeatedly uses the term “urban runoff” as support for its assertion. However, “urban runoff” is not a federally defined term, and the word “urban” does not appear in</p>	None

			<p>USEPA’s definition of “storm water”. By introducing the word “urban”, the commenter apparently seeks to redefine the federal definition of “storm water”, contained in 40 CFR § 122.26(b)(13), to include runoff and drainage that is not associated with precipitation events but with activities of urban living. This approach is not supported by legal authority, and is inconsistent with USEPA’s regulations that specifically identify numerous categories of discharges including landscape irrigation, diverted stream flows, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, and street wash water as “non-storm water.” (40 C.F.R. 122.26(d)(2)(iv)(B)(1).) Thus, USEPA has made clear that the varieties of urban discharges that are unrelated to precipitation are deemed by USEPA to be non-storm water discharges. While these types of non-storm water discharges may be regulated under MS4 permits since they enter the MS4, they are not considered storm water discharges.</p> <p>Further, while “non-storm water” is not defined in the Clean Water Act or federal regulations, the federal regulations define “illicit discharge” as “any discharge to a municipal separate storm sewer that is not composed entirely of storm water and that is not covered by an NPDES permit (other than the NPDES permit for discharges from the municipal separate sewer and discharges resulting from fire fighting activities).” (40 C.F.R. § 122.26(b)(2).) This definition is the most closely applicable definition of “non-storm water” contained in federal law and the terms are often used interchangeably. USEPA added the illicit discharge program requirement to its regulations with the stated intent of implementing the Clean Water Act’s provision requiring permits to “effectively prohibit non-storm water discharges.” (55 Fed. Reg. 47990, 47995.)</p>	
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			<p>Lastly, the commenter incorrectly asserts that the Regional Board and/or State Board have “admitted” that the definition of “storm water” includes dry weather “urban runoff” in prior orders of the State Board and/or briefing in prior litigation. The commenter attempts to use several statements from prior orders or briefs as support for this assertion. Such statements are taken out-of-context and do not stand for the propositions that the commenter asserts. While the Regional Board and/or State Board have occasionally used the term “urban runoff” when referring to some discharges regulated by the MS4 permit, neither the Regional Board nor the State Board have stated that the definition of “storm water” includes dry weather “urban runoff.” (See State Water Board Order No. WQ 91-03, p. 3.)</p>	
<p>Application of MEP</p>	<p>The MEP standard applies to discharges of both "non-stormwater" and "stormwater" from the MS4. The CWA and federal regulations treat both stormwater and non-stormwater <i>equally</i> once they are in the MS4 and are to be discharged. Thus, there is no basis to treat "dry-weather runoff" any more stringent under the CWA than wet weather. The Board's attempt to "prohibit non-stormwater discharges through the MS4 to receiving waters" exceeds federal law and is not authorized under State law. This appears to attempt to "back door" numeric limits on to the municipalities.</p>	<p>County of Los Angeles, LACFCD, Signal Hill</p>	<p>The MEP standard was intended to apply to municipal storm water discharges only. The Clean Water Act assigns different performance requirements for municipal storm water and non-storm water discharges. Clean Water Act section 402(p)(3)(B)(ii) requires that all MS4 permits shall include a requirement to effectively prohibit non-storm water discharges from entering the MS4. After that provision, the statute includes the subsidiary provision, section 402(p)(3)(B)(iii), which requires that all MS4 permits “shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.” Clearly, if non-storm water discharges must be effectively prohibited, the very next requirement in the Clean Water Act necessarily intends that the reduction in the discharge of pollutants is limited to storm water discharges only. Thus, at a minimum, federal law mandates that MS4 permits must require controls that will result in reducing storm water pollutants to the MEP yet at the same time requires that non-storm water discharges be effectively prohibited from entering the</p>	<p>None</p>

			<p>MS4. The argument that non-storm water discharges, prohibited from entry into the MS4 in the first instance, should be held to comply with only the less stringent MEP standard developed for storm water discharges in recognition of the variable quality of storm events once the non-storm water discharges exit the MS4, is contrary to and potentially renders the “effectively prohibit” requirement in section 402(p)(3)(B)(ii) meaningless. Consistent with federal law, unless non-storm water discharges to the MS4 are authorized by a separate NPDES permit or are specifically exempted under federal regulations, non-storm water discharges are appropriately subject to the effective prohibition requirement in the Clean Water Act and the Board is not limited by the MEP standard in crafting appropriate requirements for non-storm water discharges.</p> <p>Non-storm water discharges from the MS4 that are not authorized by separate NPDES permits, nor specifically exempted, are subject to requirements under the NPDES program, including discharge prohibitions, technology-based effluent limitations and water quality-based effluent limitations. (40 C.F.R. § 122.44.) USEPA’s preamble to its regulations also supports the interpretation that regulation of non-storm water discharges through an MS4 is not limited to the MEP standard in CWA section 402(p)(3)(B)(iii): “Today’s rule defines the term ‘illicit discharge’ to describe any discharge through a municipal separate storm sewer system that is not composed entirely of storm water and that is not covered by an NPDES permit. Such illicit discharges are not authorized under the Clean Water Act. Section 402(p)(3)(B) requires that permits for discharges from municipal separate storm sewers require the municipality to ‘effectively prohibit’ non-storm water discharges from the municipal separate storm sewer...Ultimately, such non-storm water discharges through a municipal separate storm sewer must either be removed from the system or become subject to an</p>	
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			<p>NPDES permit.” (55 Fed. Reg. 47990, 47995.) This process would be wholly unnecessary if MEP were the governing standard for non-storm water discharges. In addition, USEPA further stated that, “[p]ermits for such [non-storm water] discharges must meet applicable technology-based and water-quality based requirements of Section 402 and 301 of the CWA.” (55 Fed. Reg. 47990, 48037.) In addition, California law requires NPDES permits to apply “any more stringent effluent standards or limitations necessary to implement water quality control plans....” (Wat. Code, § 13377.) Accordingly, numeric water quality based effluent limitations may be imposed on dry weather, non-storm water discharges from an MS4 that are regulated under a MS4 permit.</p> <p>Further, even assuming that the commenters are correct that non-storm water and storm water discharges are treated equally once they are in the MS4 and are to be discharged, it does not necessarily mean that non-storm water discharges would always be subject to the MEP standard. In addition to establishing the MEP standard for municipal storm water discharges, CWA section 402(p)(3)(B)(iii) allows the Board, as the permitting agency to include in the MS4 permit “such other provisions as the [Board] determines appropriate for the control of such pollutants.” Thus, under this provision alone, the Board could determine that the MS4 permit should appropriately include provisions to control non-storm water discharges, including discharge prohibitions, technology-based effluent limitations and water quality-based effluent limitations.</p>	
<p>General</p>	<p>The Regional Board does not have the legal authority to extend the non-stormwater discharge prohibition from or through the MS4. The CWA only requires that permits “effectively prohibit” non-</p>	<p>County of Los Angeles, Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, LA Permit Group, Lawndale, City of</p>	<p>The commenters correctly assert that CWA section 402(p)(3)(B)(ii) requires that MS4 permits include a requirement to effectively prohibit non-storm water discharges “into the storm sewers.” However, the permit’s prohibition of non-storm water discharges “through the MS4 to receiving waters” is consistent with this mandate and USEPA’s regulations. Part 1.A. of the</p>	<p>None.</p>

	<p>storm water discharges “into the storm sewers.” It does not require the prohibition of such non-storm waters through the MS4 to receiving waters. Also, the Permittee that has the authority and ability to effectively prohibit discharges to the MS4 will often be different from the Permittee controlling the MS4 at the point where it discharges into receiving waters. There remains ambiguity as to the responsibility for such discharges.</p>	<p>Los Angeles, Pico Rivera, San Gabriel, and West Covina</p>	<p>existing 2001 LA MS4 permit requires that permittees shall effectively prohibit non-storm water discharges “into the MS4 and watercourses.” During the litigation on the 2001 permit, that language was specifically challenged by several permittees. The court upheld the language in the 2001 permit by specifically rejecting the “into” versus “from” argument. The court stated: “[A]lthough this Court recognizes that it may not always be possible to prevent something from going into the system, it probably is the cheapest method. If something does not go in, there is no concern about it coming out the other end. If the contaminant does not enter the system, there is no need to process it at the end of the system.” The court further stated that the permit’s “regulation of what goes ‘into’ the storm drain does not take away from the Petitioners’ rights and needs to control the process” and set regional controls. (<i>In re Los Angeles County Municipal Storm Water Permit Litigation</i> (Sup. Ct. Los Angeles County, March 24, 2005, Case No. BS 080548), Statement of Decision from Phase I Trial on Petitions for Writ of Mandate, pp. 16-17.) The tentative permit’s language of “through the MS4 to receiving waters” is consistent with the language in the 2001 permit upheld by the court. The slight variation in terminology between the 2001 permit and the tentative permit does not alter the Board’s existing requirement, but simply serves to provide greater clarity. In the end, there is no meaningful difference between the phrasing of “into the MS4 and watercourses” and “through the MS4 to receiving waters.” Both requirements prohibit non-storm water discharges from reaching receiving waters, which is wholly consistent with Congress’ ultimate intent in the CWA and USEPA’s regulations that such non-storm water discharges not reach receiving waters. (55 Fed. Reg. 47990, 47997 [“The entire thrust of today’s regulation is to control pollutants that enter receiving water from storm water conveyances.”].) In addition, it can be logically concluded that if non-storm water discharges are detected leaving the MS4, they must have</p>	
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			<p>entered the MS4. Further, when referring to or discussing the effective prohibition on non-storm water discharges, USEPA’s preamble to its regulations governing MS4 permit frequently use the terms “to,” “from,” and “through,” interchangeably. (<i>See, e.g.,</i> 55 Fed. Reg. 47990, 47995-47997.) Congress’ intent and USEPA’s phraseology in its own regulations supports the Board’s interpretation that there is no meaningful difference with these terms.</p> <p>To the extent that there is a meaningful difference in the phrasing, the difference is clearly in favor of the permittees. The Board would be completely within its legal authority to prohibit all non-storm water discharges from entering the MS4. However, as written, “through the MS4 to receiving waters” provides permittees greater flexibility to not only use controls to prevent non-storm water from reaching the MS4 in the first instance, but also to make use of controls in the MS4 itself so that non-storm water does not reach receiving waters. For example, the language provides permittees flexibility to use regional solutions, such as low-flow diversions where non-storm water enters the MS4, but is diverted within the MS4 (prior to discharge to the receiving water) to the sanitary sewer, as well as catch-basin inserts or other controls in the MS4 designed to prevent trash from entering receiving water. If the Board were to use the exact language in the CWA, permittees would not be afforded this flexibility.</p> <p>Further, as previously noted, the Board is not limited by the MEP standard in crafting appropriate requirements for non-storm water discharges. Accordingly, non-storm water discharges from the MS4 that are not authorized by separate NPDES permits, nor specifically exempted, are subject to requirements under the NPDES program, including discharge prohibitions, technology-based effluent limitations and water quality-based effluent limitations. (40 C.F.R. § 122.44.) Thus, the Board can</p>	
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			<p>establish requirements that are designed to reduce pollutants in non-storm water from the MS4 to receiving water.</p> <p>Lastly, there is no ambiguity as to the responsibility of non-storm water discharges. While the permittee(s) that has the authority and ability to effectively prohibit discharges to the MS4 may be different from the permittee(s) controlling the MS4 at the point where it discharges into receiving waters, the language in the permit clearly states that each permittee is responsible “for the portion of the MS4 for which it is an owner or operator.” To the extent there is a difference in responsibility, or even a shared responsibility, permittees must work together to ensure that non-exempted non-storm water discharges do not reach receiving waters. As noted above by the court in the 2001 litigation, “[i]f something does not go in, there is no concern about it coming out the other end.”</p>	
<p>General</p>	<p>The Federal Register, Volume 55, No. 222, 47990 contains an error with regard to the non-stormwater discharge prohibition. The statement in the Federal Register that 402(p)(B)(3) requires that permits for discharges from municipal storm sewers require the municipality to “effectively prohibit” non-storm water discharges from the municipal storm sewer is wrong. USEPA confuses 402(p)(B)(3), which addresses stormwater (not non-stormwater) discharges from the MS4, with 402(p)(B)(2), which once</p>	<p>Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, LA Permit Group, Lawndale, City of Los Angeles, Pico Rivera, San Gabriel, and West Covina</p>	<p>The Board does not believe that USEPA erred in its preamble to its regulations and accurately meant what it said. The Board is also not in a position to deem USEPA’s statements as incorrect, or not reflecting USEPA’s intentions and rationale. The Board appropriately defers to and relies on USEPA’s statements regarding its own regulations. If the commenters believe that USEPA erred, such assertions should be made to USEPA.</p>	<p>None.</p>

	again prohibits non-stormwater discharges to the MS4. In any case, this issue has been resolved since the federal register was published in November of 1990.			
General	Extending the prohibition from or through the MS4 would subject non-stormwater discharges (including dry weather TMDL WLAs and non-stormwater municipal action levels) to pollutant limitations at the outfall.	Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, LA Permit Group, Lawndale, City of Los Angeles, Pico Rivera, San Gabriel, and West Covina	As previously noted, the Board may appropriately prohibit non-storm water discharges from reaching receiving waters, and in doing so, may also establish discharge prohibitions, technology-based effluent limitations and water quality-based effluent limitations for such discharges. In accordance with federal regulations, the permit includes effluent limitations that are consistent with the assumptions and requirements of all available TMDL WLAs. In addition, non-storm water action levels (NALs) are used as triggers for Permittees to evaluate the efficacy of their IC/ID program and to verify that their program is effectively controlling unauthorized non-storm water from entering the MS4 and ultimately being discharged to receiving waters.	None.
General	§402(p)(B)(ii) does not (as the tentative order’s fact sheet asserts) include watercourses, which according to Regional Board staff, means waters of the State and waters of the United States, both of which lie outside of the MS4.	Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, San Gabriel, and West Covina	Although the commenters do not refer to a specific page in the fact sheet, it is presumed that the commenters are referring to page F-10, as that is only discernible reference to “watercourses” in the fact sheet that makes sense. That section of the fact sheet summarizes the existing requirements of the 2001 LA MS4 permit. Part 1.A. of the existing 2001 LA MS4 permit requires that permittees shall effectively prohibit non-storm water discharges “into the MS4 and watercourses.” As previously noted, that language was upheld by the court in the litigation on the 2001 permit.	None.
General	Leaving the language “through the MS4” would require permittees to discern non- exempt discharges within commingle flows for upstream sources outside the jurisdiction of the permittee.	Downey, Monterey Park, Pomona, Santa Clarita, South Bay Cities, Temple City, Torrance	The permit appropriately requires that permittees prevent or control non-exempt discharges “for the portion of the MS4 for which it is an owner or operator.” To the extent that there are commingled flows, permittees should work with each other to ensure that the non-exempted non-storm water discharges do not reach receiving waters. If a permittee identifies that the source of a significant non-	None.

			storm water discharge originates within an upstream jurisdiction, the permit establishes a procedure to notify the Regional Water Board and the upstream jurisdiction. At that point, the upstream jurisdiction would have the responsibility to further investigate and address the discharge as appropriate.	
Legal Authority Part VI.A.2.a.ii.	Federal regulations do not require that Permittees have adequate legal authority to control discharges from an MS4 but only to the MS4. The CWA requires the effective prohibition of non-authorized non-stormwater discharges to the MS4, and all of the subparts of 40 CFR § 122.26(d)(2)(A-F) similarly and exclusively require legal authority to address discharges to the MS4. The County requests that Part VI.A.2.a.ii. be clarified and revised to read: “Prohibit all non-storm water discharges to its MS4 not otherwise authorized or conditionally exempt pursuant to Part III.A.”	County of Los Angeles	This requirement is consistent with Congress’ intent in the CWA and USEPA’s regulations that non-storm water discharges not reach receiving waters. (55 Fed. Reg. 47990, 47997 [“The entire thrust of today’s regulation is to control pollutants that enter receiving water from storm water conveyances.”].) In order to prevent or control non-storm water discharges from reaching receiving waters, permittees must have the requisite legal authority for the portion of the MS4 for which it is an owner or operator. In addition, USEPA’s regulations for medium and large MS4s frequently use the terms “to the MS4” and “from the MS4” interchangeably. (<i>See generally</i> , 40 C.F.R. § 122.26(d).) Congress’ intent and USEPA’s phraseology in its own regulations supports the Board’s interpretation that permittees must have adequate legal authority to control discharges into and from a portion of an MS4 for which it is an owner or operator.	Change made to align with the language of Part III.A.1.
CERCLA Discharges	CERCLA is an unnecessary reference in the MS4 permit and has the potential to expose permittees to third party litigation.	Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, San Gabriel, and West Covina	Section 121(e) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) provides that no permit is required for the portion of any removal or remedial actions conducted in compliance with section 121 of CERCLA. In other words, the discharges of treated effluent from CERCLA cleanups into the MS4 are exempt from obtaining a permit, but must comply with substantive permit requirements. Discharges from CERCLA cleanups are considered “non-storm water” and normally must obtain a permit, but	None.

			<p>since CERCLA exempts them from the permit requirement, the discharges are not subject to their own separate permit. The permit addresses this situation by including in the prohibition on non-storm water discharges an exception for discharges from CERCLA cleanups that comply with certain conditions. The inclusion of this prohibition does not expose permittees to third party litigation. The purpose of the conditional prohibition is to clarify the role of USEPA and reduce the impact on the permittees. Where the specific authorized non-storm water discharge, including a temporary non-storm water discharge authorized by USEPA pursuant to sections 104(a) or 104(b) of CERCLA results in an exceedance of applicable receiving water limitations and/or WQBELs during a specific sampling event, the Permittee will not be found in violation of the limitations for that sampling event pursuant to Part III.A.5 of the permit.</p>	
<p>CERCLA Discharges</p>	<p>There should be no exception or waivers for CERCLA discharges to comply with permit requirements that other dischargers must follow. MS4 Permittees do not have such waivers when compliance is not practicable; other dischargers should be held to the same standards. CERCLA dischargers should be required to seek coverage under the appropriate NPDES Permit and comply with all requirements. In addition, dischargers must notify MS4 Permittees prior to unplanned discharges, and comply with any requirements issued by the MS4 Permittee.</p>	<p>County of Los Angeles, LACFCD</p>	<p>The Regional Board cannot change federal law. Section 121(e) of CERCLA explicitly grants a permit exemption for discharges associated with remedial actions taken in compliance with CERCLA. The Regional Board cannot require CERCLA dischargers to seek coverage under an NPDES permit if the discharge is conducted in accordance with a USEPA-approved remedial action. The purpose of the prohibition in the permit is to clarify the conditions where such a discharge could be authorized in the permit.</p> <p>Further, where the water quality characteristics of a specific authorized non-storm water discharge, including a temporary non-storm water discharge authorized by USEPA pursuant to sections 104(a) or 104(b) of CERCLA results in an exceedance of applicable receiving water limitations and/or WQBELs during a specific sampling event, the Permittee will not be found in violation of the limitations for that sampling event pursuant to Part III.A.5 of the permit.</p>	<p>None.</p>

CERCLA Discharger Requirements & Notification of Unplanned CERCLA Discharge	The fact sheet contains USEPA requirements for CERCLA dischargers when discharging into the MS4. Such requirements should be part of the Tentative Order, not just the fact sheet. In addition, notification for unplanned dischargers must be made no later than 24 hours after the discharge has occurred. Notification for unplanned discharges, even if they are emergency discharges, must be made immediately. Recommend replacing “unplanned” with “emergency”, and remove “but no later than 24 hours after the discharge has occurred).”	LACFCD	<p>Since these discharges are separately authorized by USEPA pursuant to sections 104(a) or 104(b) of CERCLA, not pursuant to section 402(p) of the Clean Water Act, it is appropriate to identify the requirements for these discharges in the Fact Sheet, but not as provisions applicable to MS4 Permittees in the order itself.</p> <p>With regard to “unplanned” discharges, as described in the Fact Sheet, notification is to occur “as soon as possible.”</p> <p>The Regional Board collaborated with USEPA on the language in the tentative order and concludes that the use of “planned” and “unplanned” is clear and reasonable.</p>	None.
Uncontaminated ground water infiltration	Delete footnote 5. Move definition of “groundwater infiltration” from footnote 5 to Definitions in Attachment A. Eliminate reference to “inflow” as it is not relevant in this situation.	South Bay Cities, Torrance	The footnote, as written, is appropriate and relevant and provides necessary clarification.	None.
Notification of Discharge from Utility Vaults and Underground Structures	The Fact Sheet notes that dischargers permitted under NPDES No. CAG990002 are required to contact the appropriate Permittee(s) within 24 hours whenever there is a discharge of 50,000 gallons or more from utility vaults and underground structures to the MS4. The	LACFCD	The Fact Sheet has been revised to remove “within 24 hours” and instead indicate that some MS4 Permittees have notification and permitting procedures in place for dischargers to follow.	Fact Sheet, p. F-27

	<p>LACFCD has a process that requires notification of up to 72 hours in advance of the discharge. Depending on the discharge location and volume, the discharger may have to apply for a Flood Permit to discharge to LACFCD’s system. Recommendation: Remove “within 24 hours” from the notification requirement. Dischargers should contact the impacted MS4s to obtain all necessary authorizations to discharge.</p>			
<p>Monitoring of Discharges Permitted under NPDES Permit No. CAG990002</p>	<p>The Fact Sheet states that notice to MS4 operators, including the LACFCD, has been added “to ensure that Permittees are aware of the requirement and can monitor the discharge to the MS4 as appropriate.” While a Permittee can voluntarily monitor such discharge, it is the discharger which has the responsibility for monitoring its discharge, not the Permittee. Recommendation: The final clause of this sentence should be modified as follows: “and can monitor the discharge to the MS4 or require monitoring by the discharger, as appropriate.”</p>	<p>County of Los Angeles</p>	<p>The Fact Sheet has been revised as proposed.</p>	<p>Fact Sheet, p. F-27</p>

Conditional Exemptions from Non-Storm Water Discharge Prohibition

<p>General</p>	<p>The non-stormwater provisions contradict federal and state law and are unsupported by evidence. The Board proposes to continue authorizing a long list of non-stormwater discharges through the MS4. The Board must “effectively prohibit” these non-stormwater discharges.</p>	<p>Environmental Groups</p>	<p>Federal regulations do not prohibit numerous categories of non-storm water discharges that are not expected to be a source of pollutants. These include landscape irrigation, diverted stream flows, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, and street wash water. (40 C.F.R. 122.26(d)(2)(iv)(B)(1).) The conditional exemptions in the permit are consistent with these federal regulations and the 2001 permit. However, this permit also specifies certain conditions, including implementation of BMPs, for each category of conditionally exempt non-storm water discharge that must be met in order for the non-storm water discharge to be exempted from the non-storm water prohibition and thus allowed through the MS4. But where, as in the permit, certain categories of non-storm water discharges have been identified by a permittee to be a source of pollutants, they are no longer exempt and become subject to the effective prohibition requirement in CWA section 402(p)(3)(B)(ii). In addition, the permit authorizes the Regional Board Executive Officer to modify a category or remove categories of conditionally exempt non-storm water discharges if the Executive Officer determines that a discharge category is a source of pollutants.</p>	<p>None.</p>
<p>General</p>	<p>Any change to conditionally exempt discharge categories should be subject to public comment/permit reopener</p>	<p>Santa Clarita</p>	<p>Once a permittee identifies a specific category of discharge to be a source of pollutants, they are no longer exempt and automatically become subject to the effective prohibition requirement in CWA section 402(p)(3)(B)(ii). In addition, like the 2001 permit, this permit authorizes the Regional Board Executive Officer to modify a category or remove categories of conditionally exempt non-storm water discharges if the Executive Officer determines that a discharge category is a source of pollutants. These provisions require immediate action to be consistent with the intent of the CWA and USEPA’s regulations for non-storm water discharges, thereby protecting receiving water quality. Requiring a public</p>	<p>None.</p>

			comment/permit reopener before any change takes effect is inconsistent with this intent.	
Monitoring	Permitting and monitoring system excessive, requires all discharges to be monitored and includes thresholds, monitoring and permitting all discharges is simply not possible.	Santa Clarita	The permit does not specify monitoring of every discharge. The MRP first requires screening for significant non-storm water discharges. The MRP then requires source identification of the outfalls with significant non-storm water discharge using a phased approach over the permit term. Through this source identification step, some significant non-storm water discharges will be addressed. The MRP then only requires monitoring of significant non-storm water discharges from the MS4 comprised of either unknown or conditionally exempt non-storm water discharges, or continuing discharges attributed to illicit discharges. This will be a subset of the total number of outfalls, and a subset of those outfalls with significant non-storm water discharge. Additionally, permittees may, in lieu of the requirements in Attachment E, implement a customized monitoring program that achieves the five Primary Objectives set forth in Part II.A. of Attachment E and includes the elements set forth in Part II.E. of Attachment E in coordination with an approved Watershed Management Program per Part VI.C	None.
General	With the exception of Landscape irrigation, the City proposes to prohibit non-stormwater discharges and require those dischargers to obtain a Discharge Permit from the Regional Board so no changes to the language are requested. The Regional Board staff may want to consider making flow the only nexus needed to document a connection between a RWL or WLA exceedence and conditionally	Torrance	Comment noted. While flow data are valuable for identifying non-storm water discharges from the MS4, the Board finds that water quality monitoring data is useful to address the question of whether the conditionally exempt non-storm water discharge is a source of pollutants to a receiving water. If other representative data are available regarding the water quality characteristics of the conditionally exempt non-storm water discharge, then flow data may be adequate to establish a nexus between a RWL exceedence and a conditionally exempt non-storm water discharge from the MS4.	None.

	exempt non-storm water discharges			
Non-emergency fire fighting activities	The manuals for non-emergency firefighting activities BMPs should be presented in tabular form consistent with Table 8.	El Segundo Fire Department, Los Angeles Area Fire Chiefs Association	Table 8 lists specific and detailed requirements that Permittees must follow to accept non-storm water discharges into their MS4. As the Fire Fighting Activities BMP manuals are fairly detailed, a reference to the manual is most appropriate.	None.
Potable Water Sources	Table 8, (Page 33): Under the provision for (LACFCD) Los Angeles County Flood Control District to mandate reporting by potable water suppliers should be amended. LACFCD has no legal mechanism to enforce this provision except where the discharge is to a County owned right of way, which is in only a very small number of cases. It makes much more sense and is consistent with the rest of the permit to require each MS4 permittee to have this requirement. Please consider revising the language accordingly, "Whenever there is a discharge of one acre-foot or more into the MS4, the MS4 Permittee shall require advance notification by the discharger to the MS4 Permittee."	Downey, Sierra Madre	The Regional Water Board agrees and has broadened the notification to include other MS4 Permittees.	Language was revised.
Potable Water Sources	Footnote 10 - The City requests that this requirement be deleted. The City has no authority over the Water District. Such a	Malibu	MS4 Permittees could compel dischargers to comply as a condition of discharge to their MS4. MS4 Permittees are required to have adequate legal authority pursuant to 40 CFR section 122.26(d)(2)(i) to control discharges to the MS4.	Language was revised.

	<p>requirement is more appropriately placed on water providers by the State. Further, the Permit should not place requirements in footnotes, which are meant for clarifications, citations and references applicable to the main text. If the requirement is not deleted, the requirement must be properly placed within the Permit requirements in the text of the page.</p>		<p>The recordkeeping requirements have been moved to the main text instead of a footnote.</p>	
<p>Discharge Prohibitions</p>	<p>The City, being a potable water distribution system and an MS4 is concerned with this section and feels that some clarifications need to be addressed. The notification and monitoring requirements are unclear as to whether they apply to any discharge or if they apply to a threshold of 1 acre-foot. The City believes that if these requirements apply to all discharges this would be excessive and a waste of City resources. The City believes that this section should be rewritten to address the issues that may arise for cities that own and operate a potable water distribution system and are also a MS4 permittee.</p>	<p>Inglewood</p>	<p>The requirement applies to discharges above a threshold volume.</p> <p>The permit has been revised to move the notification requirements for discharges above a certain volume threshold to the main body for clarity.</p>	<p>Language was revised.</p>
<p>Potable Water Sources</p>	<p>As proposed, Permittees are required to work with potable</p>	<p>County of Los Angeles</p>	<p>A MS4 Permittee may “ensure” notification, monitoring and recordkeeping by requiring it as a condition for entry</p>	<p>Language was revised.</p>

	<p>water suppliers that may discharge to the Permittee’s MS4 to “ensure” notification, monitoring and record keeping. The Permittees cannot “ensure” that a third party, such as a potable water supplier, will undertake the required notice, monitoring and record keeping. It is appropriate for the Permittees to “require” such steps as a condition for entry of the discharge into their MS4.</p> <p>In addition, recordkeeping by the potable water supplier would only be required for discharges greater than one acre-foot (325,581 gallons). In previous discussions the proposed threshold was in the range of 25,000 to 30,000 gallons for potable water suppliers and/or distributors.</p>		<p>of the discharge into the MS4, or through other inter-agency agreements.</p> <p>The Regional Water Board agrees that the volume threshold is too large and have revised the threshold to 100,000 gallons which was proposed as the annual discharge threshold to require coverage under a General Potable Water Discharge Permit in the first draft of the current Ventura MS4 Order.</p>	
<p>Potable Water Sources</p>	<p>Section III.A.2.a.ii: to clarify that the requirements set forth in items (1), (2) and (3) of Section III.A.2.a.ii apply only to discharges greater than one acre-foot, to clarify that it is clear to whom the required notification is to be given and to shorten the required notice period to be more realistic in connection with community water systems’ typical operations, in the</p>	<p>Public Water Agencies Group and Mutual Water Companies</p>	<p>The permit language has been clarified as suggested. Note that the volume threshold has been reduced to 100,000 gallons in response to other comments.</p>	<p>The language was revised.</p>

	sixth line, after “ensure,” add the following: “to ensure, <u>that for discharges greater than one acre-foot:</u> (1) <u>notification shall be provided to the MS4 Permittee with jurisdiction over the land area from which the discharge originates</u> at least 24 72 hours. . . .,” and delete the “for all discharges greater than one acre-foot” at the end of the paragraph.			
Potable Water Sources	Footnote 9: Footnote 9 lists “pollutants of concern” and due to the relatively innocuous nature of community water system discharges we suggest deleting “trash and debris, including organic matter, total suspended solids (TSS)” and replacing it with “chlorine residual and pH.”	Public Water Agencies Group and Mutual Water Companies	The permit has been revised to state that pollutants of concern may include trash and debris, including organic matter, TSS, and to add chlorine residual and pH to the list of possible pollutants of concern. This will provide flexibility with regard to the types of monitoring conducted given the characteristics of the water supply discharge (e.g. discharge from a distribution system versus discharge from a water supply reservoir).	The language of Footnote 9 has been revised.
Potable Water Sources	Section III.A.4.a: in the first paragraph, to remove any possible conflict of this section with the essential non-stormwater discharge provisions in Part III.A.2, add: “ <u>Except as provided in Parts III.A.2.a.i and ii,</u> develop and implement”	Public Water Agencies Group and Mutual Water Companies	Part III.A.4.a applies to all conditionally exempt and conditionally exempt essential non-storm water discharges. There are no conflicts between Part III.A.4.a and Part III.A.2.a.	None.
Potable Water Sources	Section III.A.4.a.ii: delete subdivision (ii) in its entirety because if such permits are already required, the provision is duplicative.	Public Water Agencies Group and Mutual Water Companies	As described in the federal storm water rulemaking, federal regulations do not require these types of discharges to be effectively prohibited from the MS4. Permits are not required, but may be issued by the Water Board for these types of discharges.	None.

<p>Potable Water Sources</p>	<p>Table 8, page 33: in the “All Discharge Categories” box, because the provision would be very difficult, if not impossible, for community water systems to comply with, delete “segregate conditionally exempt non-storm water discharges from potential sources of pollutants to prevent introduction of pollutants to the MS4 and receiving water.” Replace that language with: “Discharges from potable water sources under Part III.A.2.a.ii shall ensure the flow path between the discharge point and entrance to the MS4 (e.g., streets, gutters, swales) is free of trash and debris, organic matter and potential sources of pollutants.”</p>	<p>Public Water Agencies Group and Mutual Water Companies</p>	<p>The Regional Water Board expects that Permittees will ensure that non-storm water discharges avoid potential sources of pollutants in the flow path. This may be accomplished by selecting the flow path to avoid potential sources of pollutants, and by ensuring that the flow path between the discharge point and the entrance to the MS4 is free of potential sources of pollutants. The permit has been revised to clarify expectations regarding this requirement.</p>	<p>The language has been revised.</p>
<p>Potable Water Sources</p>	<p>Table 8, page 33: in the “All Discharge Categories” box, the Los Angeles County Flood Control District does not in all instances have authority to require a discharger, such as a community water system, to perform any acts, particularly where the Flood Control District’s facilities are not directly used by a particular discharge. To clarify the advance notification requirement under that</p>	<p>Public Water Agencies Group and Mutual Water Companies</p>	<p>The permit has been revised to clarify that the permittee with authority over the MS4 to which the discharger is discharging shall require notification.</p>	<p>Language has been revised.</p>

	<p>provision in Table 8, the language should be modified to read: “Whenever there is a discharge of one acre-foot or more into the MS4, the discharger shall provide at least 24 hours’ advance notification to the MS4 Permittee with jurisdiction over the land area from which the discharge originates.”</p>			
General	<p>Part III.A.5: We request that the board confirm that this is regulatory relief from exceedances due to potable water discharge.</p>	Santa Monica	<p>The permit states that, if a Permittee demonstrates that the water quality characteristics of a specific authorized or conditionally exempt essential non-storm water discharge resulted in an exceedance of applicable RWLs or WQBELs during a specific sampling event, the Permittee shall not be found in violation of the applicable RWL or WQBEL for that sampling event.</p>	None.
Potable Water Sources	<p>Regarding Top of Page 28, Clarification of the one acre-foot threshold. As written, it is possible to interpret the one acre-foot threshold as applying to the cumulative total of smaller discharges which exceeds one acre-foot and/or as applying only to the third measure, “record keeping”. We believe that the intent of the language is that all individual discharges greater than one acre-foot need to have all three of the noted actions taken. So we recommend that the text be re-written so that it is clearer that the threshold applies to</p>	Sierra Madre, National Fire Sprinkler Association	<p>The Board agrees and will revise the language.</p> <p>Another commenter suggested the following language, which staff feels is appropriate;</p> <p>Additionally, each Permittee shall work with potable water suppliers that may discharge to the Permittee’s MS4 to ensure that all discharges greater than one-acre foot shall have: (1) notification at least 72 hours prior to a planned discharge and as soon as possible after an unplanned discharge; (2) monitoring of any pollutants of concern⁹ in the potable water supply release; and (3) record keeping by the potable water supplier.</p>	Language revised.

	all requirements. This should be done in Table 8 as well			
Potable Water Sources	Regarding Footnote 9 at the bottom of Page 28: This footnote is difficult to interpret and contains analyses of marginal significance. We believe that it should be consistent with Footnote 10 where the analysis of chlorine residual and pH are required. Further, the language used in this footnote makes more sense in Table 8 and as a result proposes the changes.	Sierra Madre, National Fire Sprinkler Association	The footnote is clear in its current form. Non-storm water discharges are allowed only if they are not source of pollutants. The constituents detailed in the footnote are pollutants and are appropriately called out.	None.
Potable water sources	Footnote 8: While in technical terms “raw water” is not potable, there is a very slight possibility that the pipeline linking the city’s source of raw water with our groundwater recharge facility may leak due to age or private contractor error. This raw water pipeline is a part of the city’s potable water supply source and therefore an integral part of our potable water system. Thus, we respectfully request that the term “raw water” be included in the footnote language as noted below	Sierra Madre	The footnote references planned discharges. As such the footnote is appropriate as is.	None.
Potable water sources	Clarify that the 1 acre-foot threshold applies to all of the	Metropolitan Water District of Southern	Comment noted; the discharge volume threshold has been included in the main body of the Order for clarity.	Language was be revised.

	provisions in the Draft Tentative Order regarding discharges from potable water supplier. As currently worded, this could be interpreted that wastewater purveyors must provide notification and also monitoring all discharges of any volume.	California, Golden State Water Company		
Clarification of the one acre-foot threshold.	As written, it is possible to interpret the one acre-foot threshold as applying only to the third measure, “record keeping”. We believe that the intent of the language is that all discharges greater than one acre-foot need to have all three of the noted actions taken. So we recommend that the text be re-written so that it is clearer that the threshold applies to all requirements. This should be done in Table 8 as well.	National Fire Sprinkler Association, LA DWP, City of Santa Monica, Main San Gabriel Basin Watermaster	The permit has been revised for clarity. Commenter suggested language: Additionally, each Permittee shall work with potable water suppliers that may discharge to the Permittee’s MS4 to ensure <i>that all discharges greater than one-acre foot shall</i> have: (1) notification at least 72 hours prior to a planned discharge and as soon as possible after an unplanned discharge; (2) monitoring of any pollutants of concern ⁹ in the potable water supply release; and (3) record keeping by the potable water supplier. for all discharges greater than one acre-foot. ¹⁰	Language revised.
Non-Stormwater Discharges	The Upper district believes that the draft permit recognized that Community Water Systems (CWSs) have legal obligations under both state and federal laws and regulations to discharge water for the protection of public health and safety. The Upper District supports the regulatory accommodations provided in this permit which will allow CWSs and MS4	Upper San Gabriel Valley Municipal Water District	The permit does recognize a category of non-storm water discharges that are legally required, and includes provisions in recognition of these legal obligations.	None.

	<p>permittees to work together to resolve water quality problems rather than placing them in a position where conflict would have resulted.</p>			
<p>General-Burdensome</p>	<p>Community Water Servicers (CWS), that are investor-owned, may find the revision of the MS4 to be burdensome and duplicative, based on the required level of reporting that a CWS is required to submit to an MS4. Section 4.a. (Page 29 of the order). California Water Service Co. already documents our BMP measures and already follows American Water Works Association guideline when discharging.</p>	<p>California Water Service Company</p>	<p>The reporting requirements are necessary information for Permittees to have to demonstrate compliance with the Permit, and specifically the requirement to effectively prohibit non-storm water discharges that are a source of pollutants to the MS4. CWS discharges can be a significant source of non-storm water flow to the MS4, and MS4 Permittees must have the ability to control discharges to their system. Therefore MS4 Permittees must be able to track these discharges.</p>	<p>None.</p>
<p>Clean out of MS4</p>	<p>Only require clean out of MS4 in areas with greater than one acre foot of discharge to allow for more manageable number of discharges to monitor</p>	<p>Santa Clarita</p>	<p>The clean out of the MS4 system is required only when lake dewatering is being done. Due to the volume of discharge and the potential discharge of pollutants involved, the language is appropriate as is.</p>	<p>None.</p>
<p>Lake Dewatering</p>	<p>Footnote 20 - The requirement states, "Permittees shall require that the following information is maintained by the lake owner / operator..." It is not clear which permittee is responsible: the one whose MS4 discharge first enters or the one from where the discharge originates. Again, the permit should not have</p>	<p>Malibu</p>	<p>The Permittee that owns/operates the portion of the MS4 where the discharge enters the system shall require the discharger to maintain the information on the discharge.</p> <p>The Order has been revised to move the recordkeeping requirements from a footnote into the main text of the Order.</p>	<p>The language will be moved from a footnote to the main body.</p>

	requirements in footnotes. Footnotes are meant for clarifications, citations and references applicable to the main text. Please clarify the requirement and remove it from the footnotes.			
Landscape Irrigation	Landscape irrigation is a proven source of pollutants and should no longer be included in the list of conditionally exempt non-stormwater discharges.	Environmental Groups	The permit includes several provisions to ensure that landscape irrigation is not a source of pollutants to the MS4. Specifically, Permittees must develop and implement procedures that minimize the discharge of landscape irrigation water into the MS4 by promoting conservation programs. Further, the permit requires that if a Permittee determines that landscape irrigation is a source of pollutants to the MS4 that causes or contributes to exceedances of applicable RWLs or WQBELs, the Permittee must address the discharge in one of several ways, per Part III.A.4.d.	None.
Landscape Irrigation	Landscape irrigation with recycled water - please clarify what an applicable O&M plan is and the Irrigation Management Plan	Santa Clarita	For landscape irrigation with recycled water many municipalities have preexisting requirement/plans for the use of recycled water. The language is referring to existing plans/requirements.	None.
Landscape irrigation using potable water	Irrigation water discharges are subject to the requirements of an ordinance adopted pursuant to AB 1881. Moreover, it is unclear how individual dischargers (who most often will be individual residents) can implement BMPs to minimize runoff or implement water conservation programs. Such programs also are the responsibility of the water purveyor, not the MS4 operators.	County of Los Angeles	The Order is clear that Permittees' obligation is to develop and implement procedures to minimize the discharge of landscape irrigation water into the MS4 by promoting conservation programs in coordination with local water purveyors, and through coordinated outreach and education programs to residents and businesses.	None.

<p>Swimming pool/spa discharges and Dewatering of decorative fountains</p>	<p>The testing required for residential pools, spas, and decorative fountains prior to discharging is cumbersome and much too sophisticated for most property owners to conduct. In addition, in Los Angeles County alone, there are 16,000 public pools and an undetermined number of decorative fountains, which will be subject to this testing prior to discharge. The cost of testing kits or laboratory analysis will pose a huge burden on the homeowners, as well as recreation and parks departments within the City and County. Please consider deleting this condition. We agree with the requirement for volumetrically and velocity controlling these discharges but for a different reason namely that the storm drain system should be able to handle it. Regardless of the rate of discharge, there would not be a significant loss to evaporation or infiltration when discharging into the storm drain system.</p>	<p>City of Los Angeles</p>	<p>Chlorine is toxic to aquatic life. While discharges from pools and decorative fountains may be conditional exemptions to the non-storm water prohibition, it is essential to prevent chlorine from being discharged to the receiving water. The Draft Order does not specifically require owners of residential pools, spas, and decorative fountains to “test” for chlorine residual to ensure that chlorine added to the water is not discharged in concentrations above 0.1 mg/L. Rather, the Permittee has discretion as to how this determination is made within their jurisdiction. The criteria listed in this section should be used to establish municipal codes and enforcement procedures. In most cases, the Board does not anticipate the need for residual chlorine testing or permitting. The comment regarding the significance of evaporation and infiltration is noted.</p>	<p>None</p>
<p>Non-commercial car washing by residents or non-profit organizations</p>	<p>We have concern about the enforceability of any BMPs applicable to residents or non-profit organizations,</p>	<p>County of Los Angeles</p>	<p>The Board acknowledges that enforcement of BMPs for residents or non-profit organization is typically not a priority for municipalities and anticipates most municipalities will implement BMPs applicable to</p>	<p>None.</p>

	which may be high school clubs or athletic teams. Most of these activities occur during the weekend, when municipal staff is not working. It would be very costly to attempt any enforcement during non-working hours.		residents or non-profit organizations by public education and technical assistance. The Board notes that many municipalities have water usage restriction ordinances that are implemented mainly by public outreach.	
BMPs for Discharges from Non-Commercial Car Washing	The Fact Sheet includes BMPs not listed in Table 8. Recommendation: Remove "...creating a temporary berm or block off the storm drains; using pumps or vacuums to direct water to pervious areas;..."	LACFCD	The Fact Sheet will be revised to remove these conditions to align with the changes to Table 8 in the Order	The Fact Sheet will be revised.
Street/sidewalk wash water	Substitute "patio" for "street" so that sidewalk and patio rinsing are conditionally allowed but not street washing. Also include patio washing in the Table 10 discussion of sidewalk washing for industrial/commercial source control BMPs	South Bay Cities, Torrance	Street washing has been shown to be an activity that is conducted regularly and can contribute pollutants to the MS4 if not properly managed. The Board did not specify every activity that generates non-storm water that may or may not contribute pollutants. To the extent that an activity generates non-storm water discharges that are a source of pollutants, those discharges must be effectively prohibited from discharging through the MS4.	None.
Street/sidewalk wash water	The conditional exemption of street/sidewalk water is inconsistent with the requirement in the industrial/commercial MCM section that street washing must be diverted to the sanitary sewer. Sidewalk water should definitely be conditionally exempt, but so also should patios and pool	LA Permit Group	The Board disagrees that the pollutant loading from an industrial/commercial private street/sidewalk is equivalent to a typical public sidewalk or street in a non-commercial area. Heavy commercial/industrial facilities typically store hazardous materials, have heavier vehicle traffic including heavy equipment/trucks, and some have metal sources which are not found in a light commercial or residential area. The Board did not specify every activity that generates non-storm water that may or may not contribute pollutants. To the extent that an activity generates non-storm water discharges that are a source of	None.

	deck washing. If street washing has to be diverted to the sanitary sewer for industrial/commercial facilities, then it should for all facilities and so should parking lot wash water as they are similar in their pollutant loads.		pollutants, those discharges must be effectively prohibited from discharging through the MS4.	
Street/sidewalk wash water	The allowable spray washing application rate of 0.006 gallons is too low and we are not aware of any product that would meet this application rate. Please remove application rate for high pressure, low volume spray-washing. Even higher application rates may not result in wash water discharges reaching the storm drain system.	City of Los Angeles	This requirement has not changed from the existing 2001 permit. The allowable spray washing rate of 0.006 gallons per square foot is based on approved BMPs identified in Resolution No. 98-08. These BMP requirements have been included in other MS4 permits within the State of California. The washing rate of 0.006 gallons per square foot is appropriate for inclusion in this permit.	None.
Definition	Please clarify what is meant by “segregate.” Give examples of measures that could be taken to segregate non-storm water discharges from potential sources of pollutants	Peninsula Cities, South Bay Cities, Torrance, Association of California Water Agencies	The term segregate means to prevent the non-storm water runoff from contacting sources of pollutants. An example is, if air conditioner condensate was being discharged within a heavy industry facility, a Permittee should take appropriate actions to prevent the discharge from coming into contact with the hazardous waste storage area, or any other areas with sources of pollutants, and entering into a storm water conveyance system.	None.
Table 8, Attachment F – IV.A.5. [Page 33, Page F-26] All Discharge Categories –	Most residential swimming pools hold from 20,000 to 22,000 gallons of water, and decorative fountains even less. Is the one-acre foot threshold intended to exempt	County of Los Angeles, LACFCD	The threshold has been revised to 100, 000 gallons, which was proposed as the annual discharge threshold to require coverage under a General Potable Water Discharge Permit in the first draft of the current Ventura MS4 Order. This threshold will allow discharge of smaller volumes without notification. However,	Threshold was revised.

<p>Segregation of Flows, Notification</p>	<p>residential swimming pools and most decorative fountains from advanced notification? This notification would only apply to lakes dewatering and municipal/county/commercial swimming pools that are approximately half the size of an Olympic-sized swimming pool (approximately 660,000 gallons). Notification should be set at 30,000 gallons.</p>		<p>swimming pool, spa and decorative fountain discharges of less than 100,000 gallons must still meet the other conditions in Table 8.</p>	
<p>Table 8, Attachment F – IV.A.5</p>	<p>Part III.A.2.b combined with Table 8 would require Permittees to develop and implement procedures to ensure exempt non-storm water discharges that are generally perceived to be low risk meet very prescriptive and often highly resource intensive BMPs. For the dewatering of lakes, swimming pools/spas, and decorative fountains, the requirement to inspect and clean the MS4 inlet and MS4 outlet to the receiving water immediately prior to discharge is logistically infeasible, impractical, highly resource-intensive, and expensive. Moreover, since the outlet (which is discharging water from numerous sources) is constantly discharging, there should not be a need to clean</p>	<p>County of Los Angeles, LACFCD</p>	<p>For dewatering of lakes, swimming pools and decorative fountains, the permit has been revised to clarify that the provision requiring that the discharge pathway and the MS4 inlet to which the discharge is directed shall be inspected and cleaned out for discharges above the notification threshold. Furthermore, the requirement to inspect and cleanout the outlet has been removed. The notification threshold has been revised to 100,000 gallons.</p>	<p>The language has been revised.</p>

	it out. Revised language proposed.			
General	On page 33 in Table 8 there is a requirement for all CENSWDs to “Segregate conditionally exempt non storm water discharges from potential sources of pollutants to prevent introduction of pollutants to the MS4 and receiving water.” This is difficult to understand and its practical implications are not clear. Based on the discussion at the recent Board Workshop, we believe the intent is to prevent discharges from mobilizing pollutants in the flow path. We would recommend that this section be re-written to more clearly state the intent. Possible language for Table 8 might be...”Ensure flow path between discharge point and entrance to the MS4 (e.g. streets, gutters, swales) are free of trash and debris, organic matter, and potential sources of pollutants.”	Association of California Water Agencies	The commenter’s understanding is generally correct. The permit has been revised to provide additional clarity.	Language was revised.
Table 8, Attachment F – IV.A.5	The use of the word “ensure” in the conditions/BMPs should be deleted, since the requirement is being asked of a third-party discharger, not the Permittee. A Permittee cannot “ensure” the conduct	County of Los Angeles, LACFCD	A MS4 Permittee may “ensure” notification, monitoring and recordkeeping by requiring it as a condition for entry of the discharge into the MS4, or through other inter-agency agreements.	None.

	of a third-party discharger. The provision should use the term “require” instead.			
Table 8, Attachment F – IV.A.5. [Page 33, Page F-26] All Discharge Categories – Segregation of Flows, Notification	It is not the sole responsibility of the LACFCD to require dischargers of one acre-foot (325,581 gallons) or more to provide advanced notification to potentially affected MS4s, including, at minimum, the District and the Permittee with land use jurisdiction of the originating discharge. LACFCD is not necessarily in a position to know when one acre-foot or more of discharge will be entering its MS4. This should be the responsibility of all the MS4 Permittees.	LACFCD	The Order has been revised to state that potentially affected Permittees, including but not limited to the LACFCD, shall require notification by the discharger.	Language has been revised.
Table 8	The permit makes frequent reference to Table 8 (“Required Conditions for Conditionally Exempt Non-Storm Water Discharges”) as it applies to CENSWDs. The majority of required conditions apply only to Non-Essential CENSWDs (although the first applied to both Essential and Non-Essential CENSWDs). The actual required conditions for Essential CENSWDs in III A 2 a i and ii are not found in this table. ACWA is concerned that it	Association of California Water Agencies	Given that the conditions in Table 8 are identified according to the type of non-storm water discharge, there should not be any confusion regarding the conditions applicable to different discharge types.	None.

	will be confusing if the requirements that apply to Essential CENSWDS are not in Table 8 or another Table that is clearly marked as applying to Essential CENSWDS. One solution would be to have separate Tables for Essential CENSWDs and Non-Essential CENSWDs (see attached table).			
Table 8, Attachment F – IV.A.5. [Page 33, Page F-26]	As written, the Permit would require segregation of conditionally exempted discharges from potential sources of pollutants. Since the MS4 can receive flows from multiple discharges and sources, segregating the conditionally exempt flows may not be feasible.	County of Los Angeles, LACFCD	Conditionally exempt non-storm water discharges are allowed into the MS4 only if they are not a source of pollutants. If a discharge that is conditionally exempt picks up pollutants prior to discharge into a MS4 it would no longer be exempt; therefore, this provision is intended to ensure that conditionally exempt discharges that are not a source of pollutants are directed away from potential sources of pollutants in the flow path, or that the flow path is inspected and cleaned prior to discharge of the conditionally exempt flows.	None.
<i>Conditional Exemptions from Non-Storm Water Discharge Prohibition within an ASBS</i>				
General	Please change to include from MS4 directly to an ASBS	Santa Clarita	The language has been revised as suggested.	Language has been revised.
III.A.2.b. & III.A.3.a ASBS and non-ASBS	The listed non-storm water discharges which are conditionally exempt within an Areas of Special Biological Significance (ASBS) should also be conditionally exempt in areas outside an ASBS, i.e., anywhere in the LA Basin. The same concerns for structural stability, slope stability and naturally occurring flows are present	County of Los Angeles, Peninsula Cities	These categories are already covered either as authorized non-storm water discharges covered by another NPDES permit, or conditionally exempt discharges. The language included in the Order for discharges within an ASBS mimics the language adopted by the State Board in Resolution No. 2012-0012.	No change to language.

	<p>on the Palos Verdes Peninsula as they are in ASBS in Malibu, this is especially clear from the recent landslide at Whites Point in San Pedro, as well as the active landslide areas on the Palos Verdes Peninsula. Exemption of these categories are essential for structural and slope stability, and should apply in areas not designated as ASBS. The list of exemptions should be consistent for both.</p>			
Permittee Requirements				
<p>III.A.4.a.i.-vi.</p>	<p>A Permittee cannot ensure that a third party discharger follow requirements relating to its discharge. Such a requirement would potentially make the Permittee liable for any failure of the third party discharger to follow the requirements set forth in the draft Permit.</p> <p>In addition, the language can be interpreted more broadly than Regional Water Board staff may have intended. While a footnote to this provision names such parties as POTW operators, potable water supply and distribution agencies and other governmental entities, it presumably could apply to</p>	<p>County of Los Angeles</p>	<p>Permittees are required to have the authority to control discharges to their MS4s pursuant to 40 CFR section 122.26(d)(2). A Permittee may ensure that discharges to its MS4 fulfill certain requirements through various mechanisms.</p>	<p>None.</p>

	any private company or individual as well. While this provision appears to shift to the discharger responsibility for controlling its discharge, the Permittee will incur administrative costs. Also, is this requirement applicable to discharges such as irrigation runoff, car washing, and other occasional, but repetitive activities conducted by non-institutional dischargers?			
III.A.4 a ii:	We believe that this provision does not serve any purpose. If a local MS4 owner or operator requires a local permit, the MS4 permit does not need to require the Permittee to require that permit, it is already required. If the local MS4 owner or operator does not require a local permit, the MS4 permit does not change that. We propose that this provision be struck out entirely.	Sierra Madre, National Fire Sprinkler Association	The section in question refers to Permittees’ oversight of non-Permittees. The following excerpt is from the beginning of the section commented on: <i>“Develop and implement procedures to ensure that a discharger, if not a named Permittee in this Order, fulfills the following for non-storm water discharges to the Permittee’s MS4”</i> Additionally, non-storm water dischargers refer to the Permit for direction regarding discharges to the Permittees’ MS4s. The inclusion of this language reinforces the idea that some MS4 owners do require a local Permit and dischargers need to check with the operator of the system they plan to discharge into.	None.
Permittee Requirements	This section makes frequent references to Table 8 which are BMPs for Non-Essential CESNSWD (except for the very first one which covers both Essential and Non-Essential CESNSWDs). However it is confusing as worded.	Sierra Madre	The language is clear in its current form.	None.
Permittee	This in conjunction with	Santa Clarita	The Clean Water Act requires that MS4 permits	None.

<p>Requirements</p>	<p>Table 8 essentially requires permittees to divert all the stormwater from dry weather flows to the sewer. This exceeds federal requirements and is economically infeasible. Permits will be cost prohibitive, and will result in the public bypassing the permit process. Establish more reasonable thresholds.</p>		<p>effectively prohibit non-storm water discharges that are sources of pollutants to receiving waters. The requirements in the permit pertaining to non-storm water, including Table 8, are required to effectuate this federal standard. The Board may therefore appropriately prohibit non-storm water discharges from reaching receiving waters, and/or impose conditions/requirements to ensure that non-storm water discharges are not a source of pollutants to receiving waters.</p> <p>There are multiple ways of abating non-storm water discharges, including eliminating illicit discharges, directing illicit dischargers to apply for an NPDES permit, or directing them to divert their discharge to a sanitary sewer system. As written, the language is appropriate.</p>	
<p>III.A.4.c.</p>	<p>If the Permittees determine that authorized discharges contribute to a significant portion of non-storm water discharges that may have caused or contributed to an exceedance, the Permittee(s) should not be required to take further actions to determine whether the authorized discharges are a source of pollutants that causes or contributes to an exceedance of receiving water limitations. This places the burden to regulate NPDES-authorized discharges on the MS4 Permittees when such responsibilities lie with the Regional Water Board to evaluate the discharges they permit. Instead, the Permittee(s) should be</p>	<p>County of Los Angeles</p>	<p>If the Permittees determine that authorized discharges contribute to a significant portion of non-storm water discharges that may have caused or contributed to an exceedance of receiving water limitations, the Order includes provisions for Permittees to notify the Regional Board and provides that a Permittee would not be found in violation of applicable receiving water limitations for that sampling event. The Regional Board would take action as appropriate regarding the authorized discharge. The Permittee would not be required to take further action regarding the authorized discharge that caused the exceedance.</p>	<p>None.</p>

	<p>allowed to focus resources on investigating the unauthorized discharges, and report the authorized discharges to the Regional Water Board for further evaluation and action.</p>			
<p>III.A.4.d.</p>	<p>Since “effectively prohibit” requires the discharger to either stop the discharge (which may be difficult given the circumstances of the discharge) or obtain an NPDES permit, it makes more sense for the discharger to apply directly to the Regional Water Board for coverage under the NPDES permit, as this places the responsibility on the discharger to ensure that it is complying with the Clean Water Act.</p> <p>The ultimate responsibility for non-stormwater discharges is that of the discharger, not the Permittee. The Permittee must, under the Clean Water Act, “effectively prohibit” non-allowed non-stormwater discharges, but the Permittee is not responsible for arranging treatment or diversion to sanitary sewers. Obviously, a discharger can contract with a sanitary sewer to handle the discharge, but</p>	<p>County of Los Angeles, LACFCD</p>	<p>The Board disagrees. The permittees have ultimate authority and responsibility to prohibit, prevent, or otherwise control the non-storm water discharges that enter and exit the portions of the MS4 for which they are owners and/or operators. Even if the permittees do not themselves generate the pollutants entering/exiting their MS4s, the permittees are nevertheless responsible for ensuring that the pollutants do not reach receiving waters through their MS4. As recently stated by the 9th Circuit Court of Appeals, “the Clean Water Act does not distinguish between those who add and those who convey what is added by others - the Act is indifferent to the originator of water pollution.” (<i>NRDC v. County of Los Angeles</i> (2011) 673 F.3d 880, 900.) Thus, the Clean Water Act, and this permit, appropriately places responsibility for preventing or controlling illicit discharges on the permittees.</p> <p>Once the permittees identify illicit discharges, they have a responsibility to abate these discharges. Permittees may abate the discharges in several ways, including source control and source remediation, directing non-permittee dischargers to eliminate the discharge, apply for an NPDES permit, or divert their discharge to a sanitary sewer system. As written, the language is appropriate.</p>	<p>None.</p>

	that is a responsibility for the discharger, not the Permittee. Source control and source remediation should always be the preferred action to encourage and instill change in polluting behaviors.			
III.A.4.d.	<p>Strike provision III.A.4.d.iii.</p> <p>Strike provision III.A.4.d.iv. as it is already covered under “impose conditions in addition to those in Table 8” at ii</p> <p>Eliminate footnote 18 as a definition, and instead split III.A.4.d.i. into two possible actions:</p> <ul style="list-style-type: none"> <i>i. Prohibit the non-stormwater discharge or</i> <i>ii. Require that the discharger obtain coverage under an NPDES permit</i> <p>Impose conditions in addition to those in Table 8.</p>	South Bay Cities, Torrance	The language is adequate in its current form. The meaning of “impose conditions in addition to those in Table 8” is intended to relate to additional BMPs or source control measures that could be implemented to prevent the discharge of pollutants, while subsections iii and iv cover different alternatives for addressing the discharge of pollutants -- through diversion or treatment.	None.
III.A.4.d.iv.	For municipalities to “provide for treatment” of a non-storm water discharge is inappropriate use of public funds unless it is a discharge generated by the activity of the MS4 Permittee. Instead the discharger must be required to obtain a permit	County of Los Angeles, Peninsula Cities, South Bay Cities, Torrance	Illicit discharges are prohibited under Federal law and in the Order. Once they are identified, Permittees have a responsibility to abate these discharges which could mean directing the dischargers to apply for an NPDES Permit or directing them to divert their discharge to a sanitary sewer system. As written, the language is appropriate and provides flexibility by giving Permittees a number of options for addressing the non-storm water discharge.	None.

	<p>and connect the discharge to the sanitary sewer, or to treat the discharge, but that would fall under “impose additional conditions”</p> <p>Strike this provision as it is already covered under “impose conditions in addition to those in Table 8” at ii.</p>			
<p>III.A.5.</p>	<p>Liability for receiving water limitation violations should not follow for any exceedance of a water quality standard. Nevertheless, we support the intent of this provision, which is to acknowledge that Permittees should not be liable for exceeding receiving water limitations and/or water quality-based effluent limitations due to authorized or conditionally exempt non-stormwater discharges.</p> <p>We believe however, that the provision as written would be difficult to utilize and contains ambiguous language.</p> <p>First, NPDES Permittees (the “authorized discharges”) may not be required to monitor their discharges and in any event, would send monitoring reports to the RWQCB, not Permittees. Also,</p>	<p>County of Los Angeles</p>	<p>First, for the most part, authorized and conditionally exempt essential non-storm water discharges must be monitored – either pursuant to the NPDES permit under which the discharge is covered or as required by USEPA for temporary discharges pursuant to sections 104(a) or 104(b) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), or as a condition for discharging to the MS4 for discharges from potable water sources not otherwise covered by a NPDES permit.</p> <p>Further, it is the Board’s intention to regulate all pollutants, whether they are anthropogenic or naturally occurring, that are discharged from the MS4 to receiving waters. The entire purpose of a NPDES permit is to regulate discharges of “pollutants” from point sources to receiving waters. The Clean Water Act’s definition of “pollutant” in section 502(6) does not distinguish between pollutants that are caused by anthropogenic or naturally occurring sources. Even if a permittee is not able to control the source of a naturally occurring pollutant, permittees are required to control whether the pollutant is eventually discharged from the MS4 to receiving waters. Particularly in the case of non-storm water discharges, the Clean Water Act requires that NPDES MS4 permits prohibit non-storm water discharges that are a source of pollutants to receiving waters.</p>	<p>None.</p>

	<p>coordinating sampling taken at the point of discharge and in the receiving water would very extremely difficult, especially if the discharge point is some distance from the point of entry into the MS4. Also, “natural flows” are not monitored. Therefore, we recommend that for the “authorized discharges,” there be no requirement for source specific monitoring data.</p> <p>Second, there is no definition as to what constitutes “other relevant information regarding the specific non-storm water discharge as identified in Table 8.” The requirements of Table 8 apply to dischargers, not the Permittees.</p> <p>Third, none of these non-stormwater discharges should lead to liability for the Permittees unless there is a failure by Permittees to comply with the requirements of the Permit for that discharge category. Thus, if the Permittee fails to require certain BMPs or monitoring, it cannot benefit from the “safe harbor.”</p> <p>It is possible that multiple</p>		<p>Second, regarding the Board’s understanding of “other relevant information”, the language has been clarified to include “... documenting the characteristics of ...” the non-storm water discharge.</p> <p>Third, the Clean Water Act clearly states that non-storm water discharges that are a source of pollutants must be effectively prohibited. The 1990 storm water federal rulemaking identified some types of non-storm water discharges that could be exempt from the effective prohibition, assuming that they are not a source of pollutants. The federal rulemaking further specified that a permitting authority could include permit conditions to control these types of discharges. The requirements in Table 8 are intended to ensure to the extent possible that the non-storm water discharges are not a source of pollutants to receiving waters such that they can continue to be conditionally exempt from the effective prohibition. The federal rulemaking is clear that if a non-storm water discharge is a source of pollutants that the discharge must be eliminated or separately regulated by another NPDES permit.</p> <p>Finally, the Order contains procedures for source investigation by Permittees to identify whether multiple discharges are cumulatively causing or contributing to an exceedance.</p>	
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	<p>discharges could occur concurrently that could cumulatively cause or contribute to an exceedance. Permittees are also concerned about the extensive and widespread monitoring that may be required to provide that burden of proof.</p>			
<p>III.A.5</p>	<p>This condition regarding conditionally exempt non-stormwater discharges causing exceedances states, “[s]uch demonstration must be based on source specific water quality monitoring data from the authorized or conditionally exempt essential non-storm water discharge <i>and</i> other relevant information regarding the specific non-storm water discharge.” The conjunction should be changed to “<i>or</i>” rather than “<i>and</i>.” It is also unreasonable to require monitoring from every conditionally-exempt discharge. Further, given that most exceedances of receiving water limitations are discovered after at least a day, it is not possible to obtain a simultaneous sample from a conditionally exempt essential non-storm discharge. Therefore, a requirement for a permittee to provide water quality</p>	<p>Malibu</p>	<p>The language has been revised to use the term “or” instead of “and”. For the most part, authorized and conditionally exempt essential non-storm water discharges must be monitored – either pursuant to the NPDES permit under which the discharge is covered or as required by USEPA for temporary discharges pursuant to sections 104(a) or 104(b) of the CERCLA, or as a condition for discharging to the MS4 for discharges from potable water sources not otherwise covered by a NPDES permit.</p>	<p>The language has been revised.</p>

	monitoring data from a past discharge to prove it is not in violation is an impossible task and sets permittees up to fail.			
Attachment G – Non-Storm Water Action Levels				
General – Setting Non-Storm Water Action Levels (NAL)	<p>The proposed NALs are the same as water quality objectives. Because the purpose of action levels is to identify the worst problems and prioritize actions, these action levels should be set at a higher level.</p> <p><u>Recommendation</u> Review available monitoring data to set 90th percentile values as action levels.</p>	County of Los Angeles, LACFCD	<p>Numeric action levels are triggers for Permittees to verify that their program is effectively controlling unauthorized non-storm water from entering the MS4. If a non-storm water discharge is a source of pollutants, it is considered an unauthorized non-storm water discharge. These illicit discharges are prohibited under federal law and in the Order. Therefore, it is appropriate to set the non-storm water action levels based on the prevailing water quality objectives.</p> <p>The commenter may be confusing the derivation and use of non-storm water action levels with that of municipal action levels for storm water. Municipal action levels are based on nationwide Phase I MS4 monitoring data for pollutants in storm water, and computed as the upper 25th percentile concentration – representing an “upset” value, i.e. a pollutant concentration in the storm water discharge that is significantly higher than the average concentration in storm water. The MALs are used to prioritize storm water BMP implementation by identifying drainage areas with very poor storm water discharge quality relative to the average.</p>	None.
General – Pollutants with Non-anthropogenic Sources	<p>Pollutants that are known to be dominated by, or heavily contributed by, natural sources should not have action levels: e.g., Sulfate, Cyanide, Selenium, Nickel, Cadmium, Aluminum, TSS, pH, etc.</p> <p><u>Recommendation</u> Remove Action Levels for</p>	County of Los Angeles, LACFCD	<p>It is the Board’s intention to regulate all pollutants, whether they are anthropogenic or naturally occurring, that are discharged from the MS4 to receiving waters. The entire purpose of a NPDES permit is to regulate discharges of “pollutants” from point sources to receiving waters. The Clean Water Act’s definition of “pollutant” in section 502(6) does not distinguish between pollutants that are caused by anthropogenic or naturally occurring sources. Even if a permittee is not able to control the source of a naturally occurring</p>	None.

	these pollutants.		pollutant, permittees are required to control whether the pollutant is eventually discharged from the MS4 to receiving waters. This notwithstanding, the Regional Board is currently evaluating approaches to address natural sources of pollutants in its various regulatory programs. The tentative Order provides the opportunity for Permittees to identify the source of a pollutant in a non-storm water discharge and report these findings to the Regional Board. This information would be used by the Regional Board in evaluating any exceedances of non-storm water action levels in a Permittee's discharge.	
General – Setting Municipal Action Levels (MAL)	MALs should be set using the 90 th (upper 10 th) percentile values to allow for true prioritization of follow-up actions, which is the approach used in the San Diego Permit. <u>Recommendation</u> Set MALs using the 90 th percentile values.	County of Los Angeles, LACFCD	MALs are one tool for prioritization among several contained in the Order. The Regional Board has concluded that the 75 th percentile is an appropriate threshold to identify drainage areas with worse than average storm water quality.	None.
MAL for pH	The MAL for pH is set at 7.7; allowable values for pH have always been set as a range. <u>Recommendation</u> Set the MAL for pH to values outside of range 6.0–9.0.	County of Los Angeles, LACFCD	The MAL for pH has been revised to a range from 6.0-9.0.	The language has been revised.
Criteria for Submitting a MAL Action Plan	The draft Permit states: “Beginning Year 3 after the effective date of this Order, each Permittee shall submit a MAL Action Plan with the Annual Report (first MAL Action Plan due with December 15, 2013 Annual Report)...” If the effective date of the Order is October	County of Los Angeles, LACFCD	The date for submittal of the first MAL Action Plan will be changed to December 15, 2014. The running average should be calculated using all available data collected under the MRP for this Order.	The language will be revised.

	2012, October 2012 would be the beginning of Year 1, and October 2013 would be the beginning of Year 2, not Year 3. The MAL Action Plan should be submitted with the December 15, 2014 Annual Report. In addition, the time period for determining the “running average” should be clarified.			
Shellfish Criteria for Total Coliform Bacteria NAL	The NALs for Total Coliform Bacteria should be set to a higher level. <u>Recommendation</u> Review available monitoring data to set 90 th percentile values as action levels.	County of Los Angeles, LACFCD	Numeric action levels are triggers for Permittees to verify that their program is effectively controlling unauthorized non-storm water from entering the MS4. If a non-storm water discharge is a source of pollutants, it is considered an unauthorized non-storm water discharge. These illicit discharges are prohibited under federal law and in the Order. The commenter may be confusing the derivation of non-storm water action levels with that of municipal action levels for storm water. Municipal action levels are based on nationwide Phase I MS4 monitoring data for pollutants in storm water, and computed as the upper 25 th percentile concentration – representing an “upset” value, i.e. a pollutant concentration in the storm water discharge that is significantly higher than the average concentration in storm water. The MALs are used to prioritize storm water BMP implementation by identifying drainage areas with very poor storm water discharge quality relative to the average.	None.
Drinking Water (Municipal and Domestic Supply [MUN]) Criteria for Methylene Blue Active Substances (MBAS), Nitrite,	NALs for MBAS, Nitrite, Turbidity, and Aluminum should be set to a higher level. Drinking water (end-of-tap) criteria should not be used as end-of-pipe criteria or as action levels for the	County of Los Angeles, LACFCD	Numeric action levels are triggers for Permittees to verify that their program is effectively controlling unauthorized non-storm water from entering the MS4. If a non-storm water discharge is a source of pollutants, it is considered an unauthorized non-storm water discharge. These illicit discharges are prohibited under federal law and in the Order.	None.

Turbidity, and Aluminum	MS4. <u>Recommendation</u> Review available monitoring data to set 90 th percentile values as action levels.		The commenter may be confusing the derivation of non-storm water action levels with that of municipal action levels for storm water. Municipal action levels are based on nationwide Phase I MS4 monitoring data for pollutants in storm water, and computed as the upper 25 th percentile concentration – representing an “upset” value, i.e. a pollutant concentration in the storm water discharge that is significantly higher than the average concentration in storm water. The MALs are used to prioritize storm water BMP implementation by identifying drainage areas with very poor storm water discharge quality relative to the average.	
Action Levels	There are several references to “Table H-#” in Attachment G that should be corrected as necessary.	County of Los Angeles, LACFCD	References have been corrected.	The language has been revised.
Action Levels	Attachment G introduces numerous pollutants that now will need to be tested for. More time is needed to provide detailed comments specific to the Palos Verdes Peninsula . This Attachment should be advisory in nature until permittees and the Regional Board can further discuss.	Peninsula Cities	The non-storm water numeric action levels contained in Attachment G are triggers for Permittees to verify that their program is effectively controlling unauthorized non-storm water from entering the MS4. The previous Monitoring and Reporting Program of Order 01-182 also required testing for these pollutants at mass emissions stations and tributary monitoring stations. The action levels are based on the water quality standards applicable to the region’s surface waters. Standard procedures were used to derive action levels from the applicable water quality standards.	None.
VI.C.1.d Action Levels III.A.4.a.c and III.A.4.a.d Action Levels	As currently written in the Tentative Order, there is not a nexus between receiving water data (the basis for establishing watershed priorities per Part VI.C) and the non-stormwater action levels. Exceedances of the	City of Los Angeles	Numeric action levels are triggers for Permittees to verify that their program is effectively controlling unauthorized non-storm water from entering the MS4. Illicit discharges are prohibited under federal law and in the Order. Once such discharges are identified, Permittees have a responsibility to abate these discharges. A requirement of the Watershed Management Program	None.

	<p>non-stormwater action levels may occur without any commensurate exceedance or impact in the receiving water. Establishing a goal that is based upon not exceeding non-storm water action levels would therefore negate the very intent of the Watershed Management Programs – focusing on priorities, as defined by receiving water issues. As discussed in Comment #130, non-storm water action levels are more appropriately used to prioritize BMPs within a watershed.</p>		<p>includes Watershed Control Measures to prevent or eliminate non-storm water discharges. Action levels were established to identify where impacts to receiving waters are the most likely to occur, considering the existing receiving water quality as well as the beneficial uses within the receiving water. The action levels are intended to be a screening tool to prioritize the control of non-storm water discharges. Achieving action levels is only one of the goals of the Watershed Management Program. The Regional Board recognizes that in some cases, action levels may be a secondary means of prioritization.</p>	
<p>Dry Weather Analytical Monitoring</p>	<p>The tables with action levels (ALs) for brackish waters include a footnote noting that the ALs are set as the most stringent between the freshwater and salt water ALs. The footnote references tables for these ALs as H-# and H-# (H-9 and H-11 in the case of the brackish ALs in Table G-10 for the Dominguez Channel, for example). The reference to H-# tables is incorrect and should refer to the corresponding G-# tables (G-9 and G-11 for the Dominguez Channel example).</p>	<p>City of Los Angeles</p>	<p>The Regional Board concurs that the table footnotes within Attachment G referring to “Table H-“ should read “Table G-“.</p>	<p>Revised Attachment G Footnote References from “Table H-“ to “Table G-“, as appropriate.</p>
<p>Dry Weather</p>	<p>Since the Tentative Order</p>	<p>City of Los Angeles</p>	<p>The Regional Board concurs that mercury Action Levels</p>	<p>The Daily</p>

<p>Analytical Monitoring</p>	<p>(TO) does not include detailed derivation of the ALs, it is not possible to verify or comment on the validity of the numbers presented in Attachment G for priority pollutants. However, a situation where an AL may be incorrect has been identified in the case of mercury. The daily maximum AL for discharges to non-ocean waters is either 0.1 µg/L, or 1.0 µg/L in the tables provided for all of the watersheds. No information for this variation is provided.</p>		<p>are incorrect in some of the Attachment G Tables. The references will be revised accordingly.</p>	<p>Maximum Action Level for Mercury in Tables G-1, G-2, G-3, G-14, and G-15 has been revised to 0.10 µg/L.</p>
<p>Dry Weather Analytical Monitoring</p>	<p>The Fact Sheet does not provide detailed calculations or information on how each of the non-storm water action levels were developed and provides only one example of such derivation (for nickel in discharges to salt water). As such, the Regional Board's calculations behind each non-storm water action level cannot be verified. Given that these non-storm water action levels may trigger significant actions by Permittees, it is imperative that Permittees can verify that each non-storm water action level is appropriate and validly established.</p>	<p>City of Los Angeles</p>	<p>The Regional Board assumes this comment refers to Action Levels based on CTR criteria. As referenced in the fact sheet, the step-by-step procedures for calculation of Action Levels based on CTR criteria are provided in the SIP. Additional assumptions, such as selected multipliers are also discussed in the Fact Sheet. For additional transparency, tables showing details on calculations will be provided.</p>	<p>Added tables to Attachment F that include Action Level Calculations for Freshwater and Saltwater CTR pollutants.</p>

California Regional Water Quality Control Board, Los Angeles Region
Los Angeles County MS4 Permit
Response to Comments on the Tentative Order
RECEIVING WATER LIMITATIONS MATRIX

Section/Topic	Comment Summary	Commenter(s)	Response	Change Made
Regulatory/Legal Authority	The RWL as written is not a federal requirement so it is not necessary to maintain the current language.	LA Permit Group; Bradbury	NPDES permits are intended to support the objective of the federal Clean Water Act “to restore and maintain the chemical, physical, and biological integrity of the Nation's waters” (Clean Water Act section 101(a)). Water quality standards, which are the basis for the receiving water limitations (RWLs) in the Order, are the foundation for achieving this objective. To ensure that discharges do not cause or contribute to exceedances of water quality standards, RWLs provisions are included in all NPDES permits issued pursuant to CWA section 402. Further, CWA section 402(p)(3)(B)(iii) provides specific authorization to States to include other provisions the State determines appropriate for the control of pollutants in MS4 discharges. In its Phase I Stormwater Regulations, Final Rule, USEPA elaborated on these requirements, stating that, “permits for discharges from municipal separate storm sewer systems must require controls to reduce the discharge of pollutants to the maximum extent practicable, and where necessary water quality-based controls” (see 55 Fed. Reg. 47990, 47994 (Nov. 16, 1990)). USEPA reiterated in its Phase II Stormwater Regulations, Final Rule, that MS4 “permit conditions must provide for attainment of applicable water quality standards (including designated uses), allocations of pollutant loads established by a TMDL, and timing requirements for implementation of a TMDL.” USEPA Region IX has also affirmed the agency’s position that MS4 discharges must meet water quality standards in a series of comment letters on MS4 permits issued by various California regional water boards. California Water Code section 13377 also requires that NPDES permits include limitations necessary to implement water quality	None

			<p>control plans. The State Board has also found it appropriate to require compliance with state water quality standards. (See State Board Order Nos. WQ 91-03, 91-04, 98-01, 99-05, and 2001-15). The inclusion of RWLs is also consistent with the Ninth Circuit Court of Appeal’s ruling in <i>Defenders of Wildlife v. Browner</i> that the permitting authority has discretion regarding the nature and timing of requirements that it includes as MS4 permit conditions to attain water quality standards. ((1999) 191 F.3d 1159, 1166.)</p> <p>Both the State Board and Regional Board have previously concluded that discharges from the MS4 contain pollutants that have the reasonable potential to cause or contribute to excursion above water quality standards. As such, RWLs are included in the permit to ensure that individual and collective discharges from the MS4 do not cause or contribute to exceedances of water quality standards necessary to protect the beneficial uses of the receiving waters.</p>	
<p>Regulatory/Legal Authority</p>	<p>The proposed Provision V.A. of the draft tentative order ignores precedential case law and established State Water Board policies that would allow permittees to comply with standards over time through the implementation of increasingly more complex and effective BMPs. The draft tentative order may force permittees into a consistent state of non-compliance. An iterative management approach represents the soundest basis for compliance.</p>	<p>Port of Stockton; Anaheim; Brisbane; Corona; Dana Point; Murrieta; Orange County DPW; City/County Association of Governments of San Mateo County (C/CAG); Santa Rosa; Irvine; Sacramento Stormwater Quality Partnership</p>	<p>The RWLs provisions in Part V.A. of the permit are nearly identical to those adopted by the Board in the 2001 Permit, including both the prohibition on discharges from the MS4 that cause or contribute to violations of receiving water limitations and the iterative process for addressing discharges from the MS4 that have caused or contributed to violations of receiving water limitations. These provisions were included to comply with requirements of a precedential order adopted by the State Water Board (State Water Board Order No. WQ 99-05). The State Water Board issued that order in response to a decision by USEPA rejecting less stringent terms in other MS4 permits. At that time, USEPA disagreed that an MS4 permit could “authorize” exceedances of water quality standards at all, whether a permittee engaged in storm water management programs or not. In addition, the RWLs provisions do not ignore precedential case law or State Board policies. To the contrary, the RWLs provisions in the 2001 permit have been upheld by both a</p>	<p>Revisions made to Part VI.C.</p>

			<p>state court and a federal court. (<i>In re L.A. Cnty. Mun. Storm Water Permit Litig.</i>, No. BS 080548, at 4-5, 7 (L.A. Super. Ct., No. BS 080548, Mar. 24, 2005) Statement of Decision from Phase I Trial on Petitions for Writ of Mandate, pp. 4-5, 7; <i>NRDC v. County of Los Angeles</i> (2011) 673 F.3d 880, 886.)</p> <p>Additionally, the majority of pollutants of concern from the Permittees' MS4s are addressed by TMDLs. The permit provides that RWL exceedances for pollutants addressed by TMDLs will be addressed per TMDL specific compliance schedules, which are consistent with Board-adopted and fully approved TMDL implementation schedules. These TMDL implementation schedules were developed to accommodate Permittees' efforts to achieve compliance with standards over time.</p> <p>For waterbody-pollutant combinations not addressed by a TMDL, the Order has been revised to allow Permittees to develop and implement a Watershed Management Program to address receiving water limitations not otherwise addressed by a TMDL. The Watershed Management Program must include, at the outset, a reasonable assurance analysis for the water body-pollutant combination(s) addressed by the program that demonstrates that the watershed control measures proposed in the program will be sufficient to control MS4 discharges such that they do not cause or contribute to an exceedance of the applicable receiving water limitation(s). Additionally, the Watershed Management Program must identify enforceable requirements and milestones and dates for their achievement to address the pollutants within a timeframe that is as short as possible. For pollutants that are in a similar class to those already addressed by a TMDL for the water body, the requirements, milestones and dates for their achievement must align with those established in the TMDL implementation schedule. A Permittee's full compliance with all requirements and dates for their achievement in an</p>	
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			<p>approved Watershed Management Program will constitute compliance with the receiving water limitations in Part V.A. addressed by the program. Permittees that do not elect to develop a Watershed Management Program are required to demonstrate compliance with receiving water limitations pursuant to Part V.A.</p>	
<p>Regulatory/Legal Authority</p>	<p>The RWL section is unlawful and an abuse of discretion because it is impossible to comply with. The RWLs section does not recognize the finding by the State Water Board’s Blue Ribbon Panel and there is no evidence in the fact sheet that supports a finding that the Permittees can comply with this section.</p>	<p>LACFCD; County of Los Angeles</p>	<p>The Board disagrees. As previously stated in these responses, the RWL provisions are authorized by federal law. Further, the RWL section in this permit is consistent with the RWL section in the 2001 permit. Those RWLs provisions in the 2001 permit have been upheld by both a state court and a federal court. (<i>In re L.A. Cnty. Mun. Storm Water Permit Litig.</i>, No. BS 080548, at 4-5, 7 (L.A. Super. Ct., No. BS 080548, Mar. 24, 2005) Statement of Decision from Phase I Trial on Petitions for Writ of Mandate, pp. 4-5, 7; <i>NRDC v. County of Los Angeles</i> (2011) 673 F.3d 880, 886.) Permittees have the necessary authority and ability to control discharges of pollutants from their MS4s to implement these provisions. Moreover, the Los Angeles County Superior Court found that “there was no issue of impossibility” in the requirements of the 2001 permit, including the RWLs. (<i>In re L.A. Cnty. Mun. Storm Water Permit Litig.</i>, No. BS 080548, at 4-5, 7 (L.A. Super. Ct., No. BS 080548, Mar. 24, 2005) Statement of Decision from Phase I Trial on Petitions for Writ of Mandate, p. 9.)</p> <p>Further, the commenters have misconstrued the findings of the State Water Board’s Blue Ribbon panel. The panel focused on concerns about unpredictability of BMP performance, which might suggest that calculating technology based effluent limitations is not feasible but has no bearing on whether NPDES permits must include provisions that require compliance with water quality standards (expressed as receiving water limitations in a permit). Further, the Blue Ribbon Panel did not discuss the feasibility of numeric effluent limitations for non-storm water discharges.</p>	<p>None</p>

Regulatory/Legal Authority – Consistency	The State Water Board’s blue ribbon panel recognized the difficulty of meeting standards end of pipe and, therefore, did not recommend the adoption of numeric effluent limitations. However, strict interpretation of Provision V.A. is no different than a numeric effluent limitation and suffers from the same logistical and feasibility challenges.	Port of Stockton; County of Los Angeles	<p>The commenter has misconstrued the findings of the State Water Board’s panel. The panel focused on concerns about unpredictability of BMP performance, which might suggest that calculating technology based effluent limitations is not feasible but the panel’s findings have no bearing on whether NPDES permits must include provisions that require compliance with water quality standards (expressed as receiving water limitations) nor do the findings impact the Regional Board’s ability to calculate water quality based effluent limitations on the basis of the prevailing water quality standards and available WLAs.</p> <p>The State Water Board, in Order WQ 2006-0012 (Boeing), has made clear that “infeasibility” refers to “the ability or propriety of establishing” numeric limits, as opposed to the feasibility of compliance. USEPA has also testified before this Board that the feasibility of numeric effluent limitations refers to the ability to calculate the numeric effluent limitations not to the feasibility of compliance with such limitations. The Regional Board concludes that it is feasible to establish numeric WQBELs. While a lack of data may have hampered the development of numeric WQBELs for MS4 discharges in earlier permit terms, in the last decade, 33 TMDLs have been developed for water bodies in Los Angeles County in which WLAs are assigned to MS4 discharges. In each case, part of the development process entailed analyzing pollutant sources and allocating loads using empirical relationships or quantitative models. As a result, it is possible to use these numeric WLAs to derive numeric WQBELs for MS4 discharges. Further, the Blue Ribbon Panel did not discuss the feasibility of numeric effluent limitations for non-storm water discharges.</p>	None
Regulatory/Legal Authority	While local governments recognize the importance of attaining water quality standards, these standards were never intended to	Port of Stockton; National Association of Flood and Stormwater Management	As previously stated, NPDES permits are intended to support the objective of the federal Clean Water Act “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters” (Clean Water Act section 101(a)). Water quality standards, which are the basis for	None

	<p>apply directly to stormwater. Instead, Congress adopted a standard that municipal stormwater dischargers “require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or State determines appropriate for the control of such pollutants” (33 U.S.C. §1342(p)(3)(B)(i)-(iii))</p>	<p>Agencies (NAFSMA)</p>	<p>the receiving water limitations in the Order, are the foundation for achieving this objective. The water quality standards contained in the Basin Plan and other prevailing standards such as those in the California Toxics Rule (CTR) are applicable to all surface waters. Where surface waters are impacted by MS4 discharges, these discharges must be controlled such that they do not cause or contribute to exceedances of in-stream water quality standards. To ensure that discharges do not cause or contribute to exceedances of receiving water limitations, RWL provisions are included in all NPDES permits issued pursuant to CWA section 402. Additionally, the standard adopted by Congress for MS4 discharges consists of <i>three</i> parts: (1) an effective prohibition on non-storm water discharges, (2) controls to reduce the discharge of pollutants to the maximum extent practicable and (3) other provisions as the Administrator or State determines appropriate for the control of such pollutants. In the third part, Congress specifically provided authorization to States to include other provisions the State determines appropriate for the control of pollutants in MS4 discharges. This includes controls to ensure compliance with water quality standards. The State Board has also found it appropriate to include receiving water limitations in MS4 permits (State Board Order Nos. WQ 91-03, 91-04, 98-01, 99-05, and 2001-15). The inclusion of RWLs is also consistent with the Ninth Circuit Court of Appeal’s ruling in <i>Defenders of Wildlife v. Browner</i> that the permitting authority has discretion regarding the nature and timing of requirements that it includes as MS4 permit conditions to attain water quality standards. ((1999) 191 F.3d 1159, 1166.) Receiving water limitations are thus included in the permit to ensure that individual and collective discharges from the MS4 do not cause or contribute to exceedances of water quality standards necessary to protect the beneficial uses of the receiving waters.</p>	
<p>Regulatory/Legal Authority</p>	<p>Where receiving waters are not meeting water quality</p>	<p>Port of Stockton</p>	<p>Where receiving waters are not meeting water quality standards due to MS4 discharges and the pollutant(s) is</p>	<p>Revisions made to Part</p>

	<p>standards, the appropriate action is to adopt a Total Maximum Daily Load (TMDL), which specifically recognizes that current water quality standards are not being attained and will be addressed by regulation that supports implementation of an adaptive program over an extended period of time.</p> <p>Requiring immediate compliance with water quality standards for a non-continuous discharge is not required by law and represents bad public policy.</p>		<p>not already addressed by a TMDL, the Order has been revised to allow Permittees to develop and implement a Watershed Management Program to address receiving water limitations not otherwise addressed by a TMDL. The Watershed Management Program must include, at the outset, a reasonable assurance analysis for the water body-pollutant combination(s) addressed by the program that demonstrates that the watershed control measures proposed in the program will be sufficient to control MS4 discharges such that they do not cause or contribute to an exceedance of the applicable receiving water limitation(s). Additionally, the Watershed Management Program must identify enforceable requirements and milestones and dates for their achievement to address the pollutants within a timeframe that is as short as possible. For pollutants that are in a similar class to those already addressed by a TMDL for the water body, the requirements, milestones and dates for their achievement must align with those established in the TMDL implementation schedule. A Permittee's full compliance with all requirements and dates for their achievement in an approved Watershed Management Program will constitute compliance with the receiving water limitations in Part V.A. addressed by the program. Permittees that do not elect to develop a Watershed Management Program are required to demonstrate compliance with receiving water limitations pursuant to Part V.A. Where MS4 discharges are causing or contributing to exceedances of receiving water limitations, and enhanced storm water and non-storm water controls are available to control the pollutants in the MS4 discharge, it is preferable to directly implement these through the Permittees' storm water management programs rather than go through the administrative process of developing a TMDL first and then implementing these control measures.</p>	<p>VI.C.</p>
<p>Regulatory/Legal Authority</p>	<p>The absence of the iterative process disables a safeguard to protect permittees against</p>	<p>Cities of: Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale,</p>	<p>The order includes the same provision that outlines the iterative process for responding to exceedances of receiving water limitations caused or contributed to by discharges from the MS4 as is included in the 2001 MS4</p>	<p>Revisions made to Part VI.C.</p>

	<p>unjustifiably strict compliance with water quality standards that is a requisite feature in all MS4 permits issued in California. The tentative order circumvents the iterative process by creating an alternative referred to as the adaptive/management process which is only available to those permittees that opt for a watershed management program.</p> <p>The iterative process must be included as required by Water Quality Orders 2001-15 and 2009-0008. Moreover, both the draft Caltrans MS4 permit and the draft Phase II MS4 permit contain references to the iterative process.</p> <p>Regional Board staff should incorporate the iterative process into the tentative order in the findings section and in the RWL section. It should also be referenced again under a revised MEP definition.</p>	<p>Lawndale, Pico Rivera, San Gabriel and West Covina</p>	<p>permit. This provision follows the language of the State Water Board’s precedential decision in Order No. WQO 99-05. See Part V.A.3 of the order, which is the same as Parts 2.3 and 2.4 of the 2001 MS4 permit.</p> <p>Furthermore, TMDLs and the schedules of implementation adopted as part of the TMDLs create an orderly iterative process for achieving compliance with the final WQBELs. This is addressed in Part VI.E. of the tentative order, which provides that a Permittee shall not be considered in violation of this Order for the specific pollutant addressed in the TMDL if it is in compliance with the applicable TMDL requirement(s), including compliance schedules, of Part VI.E. and Attachments L through R.</p> <p>For receiving water limitations for water body-pollutant combinations not addressed by a TMDL, the Order has been revised to allow Permittees to develop and implement a Watershed Management Program to address these receiving water limitations. The Watershed Management Program is a proactive and robust framework for identifying and implementing in a timely fashion, control measures for MS4 discharges such that they do not cause or contribute to exceedances of receiving water limitations. The Watershed Management Program must include, at the outset, a reasonable assurance analysis for the water body-pollutant combination(s) addressed by the program that demonstrates that the watershed control measures proposed in the program will be sufficient to control MS4 discharges such that they do not cause or contribute to an exceedance of the applicable receiving water limitation(s). Additionally, the Watershed Management Program must identify enforceable requirements and milestones and dates for their achievement to address the pollutants within a timeframe that is as short as possible. For pollutants that are in a similar class to those already addressed by a TMDL for the water body, the requirements, milestones and dates for</p>	
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			<p>their achievement must align with those established in the TMDL implementation schedule. A Permittee’s full compliance with all requirements and dates for their achievement in an approved Watershed Management Program will constitute compliance with the receiving water limitations in Part V.A. addressed by the program. Permittees that do not elect to develop a Watershed Management Program are required to demonstrate compliance with receiving water limitations pursuant to Part V.A.</p>	
<p>Regulatory/Legal Authority Fact Sheet - Rationale for Receiving Water Limitations</p>	<p>The Fact Sheet incorrectly states that the “cause or contribute” language is “in accord with the State Board’s finding in Order WQ 98-01.” In that order, however, the State Board upheld RWL permit language that expressly made compliance with the water quality standards subject to compliance with a BMP-based approach. The RWL language in that Permit, unlike the language proposed for the Order, was truly iterative, expressly stating that Permittees would “not in violation of this provision [prohibiting exceedances of water quality objectives] so long as they are in compliance with” an iterative process that requiring evaluation of a drainage area management plan.</p>	<p>County of Los Angeles</p>	<p>The Board disagrees. The State Board, in Order No. 98-01, concluded that MS4 permits must include provisions to achieve compliance with water quality standards, and further that MS4 permits should be written to clearly identify water quality standards and to clearly require that Permittees shall not cause or contribute to exceedances of such water quality standards. The implementation of BMPs was identified by the State Board as the mechanism by which Permittees would achieve compliance, not as the means of determining compliance. Further, State Board Order No. 98-01 was revised by State Board Order 99-05, and specifically eliminated the language cited by the commenter in response to USEPA objections. Order No. 98-01 was cited along with Order 99-05 because Order No. 99-05 builds on the conclusions of the State Board in Order No. 98-01.</p>	<p>None</p>

Regulatory/Legal Authority Fact Sheet - Rationale for Receiving Water Limitations	The Fact Sheet states that USEPA Region IX, in a “series of comment letters” (the only one cited in the Fact Sheet dates from January 21, 1998), contended that “MS4 discharges must meet water quality standards.” The comment letter in question, however, was sent before the Ninth Circuit’s decision in <i>Defenders of Wildlife</i> . In <i>Defenders</i> , the Ninth Circuit expressly ruled that MS4 dischargers were not required to meet such water quality standards.	County of Los Angeles	The Board’s reference to the comment letters is not impacted by the <i>Defenders</i> case. In that case, the Ninth Circuit Court of Appeals merely confirmed that the Clean Water Act provided the authority to require compliance with state water quality standards. Thus, while the Court did rule that the permitting authority could require less than strict compliance with state water quality standards, the Court also expressly ruled that: “Under [the discretionary provision of CWA § 402(p)(3)(B)(iii)], the EPA has the authority to determine that ensuring strict compliance with state water quality standards is necessary to control pollutants.” (<i>Defenders of Wildlife v. Browner</i> (1999) 191 F.3d 1159, 1166.)	
Regulatory/Legal Authority Fact Sheet - Rationale for Receiving Water Limitations	The Phase II Stormwater Regulations final rule does not cover large and medium MS4s and thus is not authority for the Order.	County of Los Angeles	The Board agrees that the Phase II Stormwater rule does not cover large and medium MS4s. However, the Phase II rule provides additional evidence that USEPA continues to hold its position that MS4 permit conditions must provide for attainment of applicable water quality standards.	None
Regulatory/Legal Authority Fact Sheet - Rationale for Receiving Water Limitations	The Fact Sheet incorrectly asserts that the Order, “consistent with CWA section 402(p)(B)(3)(iii) and 40 CFR section 122.44(d)(1), ... includes a provision stating that discharges from the MS4 that cause or contribute to an exceedance of receiving water limitations are prohibited.” This section of the CWA does not	County of Los Angeles	The RWL provisions are consistent with CWA section 402(p)(3)(B)(iii). This section of 402(p)(B)(3) includes two parts: (1) a requirement to implement control to reduce the discharge of pollutants to the maximum extent practicable (MEP) and, (2) authorization to the permitting agency to include other provisions as it determines appropriate for the control of such pollutants. Furthermore, 40 CFR section 122.44 applies to all NPDES permits and section 122.44(d)(1) requires that NPDES permits include any requirements in addition to or more stringent than technology based standards necessary to achieve water quality standards. In the case of MS4 permits, the applicable technology based standard is the	None

	require such language, but only that pollutants discharged from the MS4 be controlled to the MEP. Also, 40 CFR § 122.44(d)(1) does not apply to MS4 permits.		MEP standard. Further, utilizing the authority provided by CWA section 402(p)(3)(B)(iii), and based on USEPA statements and guidance, the State Board has determined that MS4 permits must include compliance with water quality standards. Accordingly, the provisions contained in 40 CFR section 122.44, subdivision (d), are applicable to MS4 permits.	
Regulatory/Legal Authority-Consistency	The Tentative Order and the 2001 MS4 Permit are both inconsistent with Order 99-05 in that the iterative process is only included in the Receiving Water Limitations part of the permit instead of being included in both the Discharge Prohibition and the Receiving Water Limitations parts of the permit. The Regional Water Board could correct this deficiency by adding iterative process language similar to the language in Part V of the Tentative Order to Part III of the Order.	City of Signal Hill	The commenter is confusing the reference to Discharge Prohibitions in Order 99-05, with the requirement to effectively prohibit non-storm water discharges in CWA section 402(p)(3)(B)(ii). Footnote 3 in Order No. 99-05 makes it clear that the reference to Discharge Prohibitions pertains to discharge prohibitions established in water quality control plans, which are established pursuant to California Water Code section 13243.	None
Regulatory/Legal Authority	RWLs in the adopted MS4 permit must remain as stringent as they are currently in the 2001 MS4 permit. The RWLs comply with the Clean Water Act and have stood the test of administrative, judicial, and enforcement challenges. The Board should decline any	Environmental Groups	The RWL provisions in Part V.A. of the order are nearly identical to those adopted by the Board in the 2001 Permit, including both the prohibition on discharges from the MS4 that cause or contribute to violations of receiving water limitations and the process for addressing discharges from the MS4 that have caused or contributed to violations of receiving water limitations. Consistent with the Board’s prior interpretations, which have withstood legal challenges, Part V.A. does not contain a “safe harbor.” In this permit, however, the Board has found it appropriate	None

	<p>requests to revise the RWLs to incorporate a “safe harbor” provision. Any weakening in the RWL language would fall below federal minimum requirements and would constitute a violation of the CWA’s anti-backsliding provisions.</p>		<p>to allow permittees to submit a Watershed Management Plan. If a permittee chooses to submit a Watershed Management Plan, RWL exceedances for pollutants addressed by TMDLs will be addressed per TMDL specific compliance schedules, which are consistent with Board-adopted and fully approved TMDL implementation schedules. These TMDL implementation schedules were developed to accommodate Permittees’ efforts to achieve compliance with standards over time. Further, for waterbody-pollutant combinations not addressed by a TMDL, the permit has been revised to allow Permittees to develop and implement a Watershed Management Program to address receiving water limitations not otherwise addressed by a TMDL. The Watershed Management Program must include, at the outset, a reasonable assurance analysis for the water body-pollutant combination(s) addressed by the program that demonstrates that the watershed control measures proposed in the program will be sufficient to control MS4 discharges such that they do not cause or contribute to an exceedance of the applicable receiving water limitation(s).</p> <p>It is unclear whether the anti-backsliding provisions apply to receiving water limitations. However, to the extent that the anti-backsliding provisions do apply, the RWLs provisions and the Watershed Management Program do not violate the anti-backsliding provisions. Permittees are still required to comply with water quality standards, although the Board, consistent with federal law, has provided permittees the flexibility on how to demonstrate such compliance. This permit incorporates new provisions implementing 32 TMDLs adopted by the Board and/or USEPA. The purpose of the Watershed Management Program is to provide permittees the flexibility to implement permit requirements in an integrated and collaborative fashion to address water quality priorities, such as TMDLs. This allows permittees to schedule implementation of control measures in consideration of all water quality priorities to achieve compliance with water</p>	
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<p>Compliance/Liability Fact Sheet - Rationale for Receiving Water Limitations</p>	<p>The 9th Circuit, in its decision in <i>NRDC v. County of Los Angeles</i>, disregarded language in the 2001 permit and held that each subsection of Part 2 of the Permit was to be enforced separately. The Court also ignored the statement of former Board Chair and current Board Member Francine Diamond and the sworn written testimony of then-Executive Officer Dennis Dickerson that Part 2.2 was to be read in conjunction with Part 2.3, and that exceedances of water quality standards would not per se subject the Permittees to liability under the Permit and the CWA.</p>	<p>County of Los Angeles; West Hollywood</p>	<p>quality standards as soon as possible..</p> <p>The Board disagrees. The Ninth Circuit’s decision is consistent with the Regional Board’s interpretation of its 2001 permit and with a prior state court decision concerning the 2001 permit. In 2005, well before the Ninth Circuit decision, the Los Angeles Superior Court upheld the RWL provisions in the 2001 permit, stating: “In sum, the Regional Board acted within its authority when it included Parts 2.1 and 2.2 in the Permit without a ‘safe harbor,’ whether or not compliance therewith requires efforts that exceed the ‘MEP’ standard.” (<i>In re L.A. Cnty. Mun. Storm Water Permit Litig.</i> (L.A. Super Ct., No. BS 080548, Mar. 24, 2005) Statement of Decision from Phase I Trial on Petitions for Writ of Mandate, pp. 405, 7.) The Ninth Circuit’s decision in <i>NRDC v. County of Los Angeles</i> in 2011 was thus not a fundamental change in how the RWLs in the 2001 permit has been interpreted. The RWL provisions in Part V.A. of the order are nearly identical to those adopted by the Board in the 2001 Permit.</p> <p>The commenters’ reference to the letter from Francine Diamond, Chair, Los Angeles Water Board dated January 30, 2002 is also misplaced and is not indicative of any change. The Los Angeles Superior Court specifically found that the RWLs provisions in the 2001 permit was consistent with the 2002 Diamond letter and State Board Orders WQ 99-05 and 2001-15 (<i>Id.</i>, p. 6.) The 2002 Diamond letter expressed the then-Chairperson’s intention that the Regional Board would continue to work with permittees in the hope that the new provisions would enable continuous progress toward improved MS4 discharge quality. It also sought to assure dischargers that adoption of the 2001 Permit did not necessarily mean the Regional Board would immediately impose penalties based on strict liability. To this extent, the memo was a statement of intent with respect to how the Regional Board would exercise its enforcement discretion. It did not, however, alter the permit requirements or revoke the Regional Board’s enforcement authority.</p>	<p>None</p>
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<p>Compliance/Liability</p>	<p>Recent court decisions have created a new interpretation of the RWL.</p> <p>The draft language exposes the municipalities to enforcement action (and third party law suits) even when the municipality is engaged in an adaptive management approach to address the exceedance.</p>	<p>LA Permit Group; County of Los Angeles; Bradbury; Downey; El Segundo; Inglewood; Malibu; Monterey Park; Peninsula Cities; Torrance; Ventura Countywide Stormwater Quality Management Program; Santa Monica; Signal Hill; Agoura Hills; Artesia; Beverly Hills; Hidden Hills; La Mirada; Monrovia; Norwalk, Rancho Palos Verdes, San Marino, South El Monte, Westlake Village, and West Hollywood</p>	<p>As noted immediately above, the recent decision in <i>NRDC v. County of Los Angeles</i> did not create a new interpretation of the RWLs. Rather, the Ninth Circuit’s decision merely confirmed what the Los Angeles Superior Court decided in 2005.</p> <p>The above notwithstanding, the majority of pollutants of concern from the Los Angeles County MS4 are addressed by TMDLs. The order provides that RWL exceedances for pollutants addressed by TMDLs will be addressed per TMDL specific compliance schedules, which are consistent with Board-adopted and fully approved TMDL implementation schedules. These TMDL implementation schedules were developed to accommodate an adaptive management approach.</p> <p>For receiving water limitations for water body-pollutant combinations not addressed by a TMDL, the Order has been revised to allow Permittees to develop and implement a Watershed Management Program to address these receiving water limitations. The Watershed Management Program is a proactive and robust framework for identifying and implementing in a timely fashion, control measures for MS4 discharges such that they do not cause or contribute to exceedances of receiving water limitations. A Permittee’s full compliance with all requirements and dates for their achievement in an approved Watershed Management Program will constitute compliance with the receiving water limitations in Part V.A. addressed by the program.</p>	<p>Revisions made to Part VI.C. to address water body-pollutant combinations not otherwise addressed by a TMDL.</p>
<p>Compliance/Liability</p>	<p>The RWL section creates inordinate legal liability for Permittees due to third party lawsuits. The Permit recognizes this issue with respect to those pollutants addressed by TMDLs. There is no reason why a different standard should</p>	<p>LACFCD; County of Los Angeles</p>	<p>For receiving water limitations for water body-pollutant combinations not addressed by a TMDL, the Order has been revised to allow Permittees to develop and implement a Watershed Management Program to address these receiving water limitations. The Watershed Management Program is a proactive and robust framework for identifying and implementing in a timely fashion, control measures for MS4 discharges such that they do not cause or contribute to exceedances of receiving water</p>	<p>Revisions made to Part VI.C.</p>

	<p>apply to the pollutants not addressed by TMDLs.</p>		<p>limitations. The Watershed Management Program must include, at the outset, a reasonable assurance analysis for the water body-pollutant combination(s) addressed by the program that demonstrates that the watershed control measures proposed in the program will be sufficient to control MS4 discharges such that they do not cause or contribute to an exceedance of the applicable receiving water limitation(s). Additionally, the Watershed Management Program must identify enforceable requirements and milestones and dates for their achievement to address the pollutants within a timeframe that is as short as possible. For pollutants that are in a similar class to those already addressed by a TMDL for the water body, the requirements, milestones and dates for their achievement must align with those established in the TMDL implementation schedule. A Permittee's full compliance with all requirements and dates for their achievement in an approved Watershed Management Program will constitute compliance with the receiving water limitations in Part V.A. addressed by the program. Permittees that do not elect to develop a Watershed Management Program are required to demonstrate compliance with receiving water limitations pursuant to Part V.A.</p>	
<p>Compliance/Liability</p>	<p>Permittees will be exposed to considerable vulnerability, even though municipalities have little control over the sources of pollutants that create the vulnerability.</p>	<p>LA Permit Group; Inglewood; Malibu; West Hollywood</p>	<p>The Board disagrees. The permittees have ultimate authority and responsibility to prohibit, prevent, or otherwise control discharges that enter and exit the portions of the MS4 for which they are owners and/or operators. Even if the permittees do not themselves generate the pollutants entering/exiting their MS4s, the permittees are nevertheless responsible for ensuring that the pollutants do not reach receiving waters through their MS4. As recently stated by the 9th Circuit Court of Appeals, "the Clean Water Act does not distinguish between those who add and those who convey what is added by others - the Act is indifferent to the originator of water pollution." (<i>NRDC v. County of Los Angeles</i> (2011) 673 F.3d 880, 900.) Thus, the Clean Water Act, and this permit, appropriately places responsibility for preventing</p>	<p>None</p>

			or controlling MS4 discharges on the permittees.	
Compliance/Liability Fact Sheet - Rationale for Receiving Water Limitations	The statement that the Board “will work with the MS4 Permittees through the process outlined in Part V.A.3 in this Order” or through the watershed management programs which mirror “the iterative process in Part V.A.3” provides no comfort or assurance to Permittees. Permittees still are faced with a condition requiring strict compliance with water quality standards and which can be enforced in citizens’ suits with the potential for civil penalties, the payment of attorneys’ fees and the award of injunctive relief, relief that might conflict with the requirements of the Order.	County of Los Angeles	For receiving water limitations for water body-pollutant combinations not addressed by a TMDL, the Order has been revised to allow Permittees to develop and implement a Watershed Management Program to address these receiving water limitations. The Watershed Management Program is a proactive and robust framework for identifying and implementing in a timely fashion, control measures for MS4 discharges such that they do not cause or contribute to exceedances of receiving water limitations. The Watershed Management Program must include, at the outset, a reasonable assurance analysis for the water body-pollutant combination(s) addressed by the program that demonstrates that the watershed control measures proposed in the program will be sufficient to control MS4 discharges such that they do not cause or contribute to an exceedance of the applicable receiving water limitation(s). Additionally, the Watershed Management Program must identify enforceable requirements and milestones and dates for their achievement to address the pollutants within a timeframe that is as short as possible. For pollutants that are in a similar class to those already addressed by a TMDL for the water body, the requirements, milestones and dates for their achievement must align with those established in the TMDL implementation schedule. A Permittee’s full compliance with all requirements and dates for their achievement in an approved Watershed Management Program will constitute compliance with the receiving water limitations in Part V.A. addressed by the program. Permittees that do not elect to develop a Watershed Management Program are required to demonstrate compliance with receiving water limitations pursuant to Part V.A.	Revisions made to Part VI.C.
Compliance/Liability Fact Sheet - Rationale for Receiving Water	The County is not looking for a “safe harbor,” and the Order’s multiple compliance provisions are	County of Los Angeles	For receiving water limitations for water body-pollutant combinations not addressed by a TMDL, the Order has been revised to allow Permittees to develop and implement a Watershed Management Program to address	Revisions made to Part VI.C.

<p>Limitations</p>	<p>fully applicable and subject to enforcement if they are violated or ignored. The County is, however, requesting RWL provisions that do not leave them, and every other Permittee, in potential violation of the Order (and the CWA) the day that the Order is issued.</p>		<p>these receiving water limitations. The Watershed Management Program is a proactive and robust framework for identifying and implementing in a timely fashion, control measures for MS4 discharges such that they do not cause or contribute to exceedances of receiving water limitations. The Watershed Management Program must include, at the outset, a reasonable assurance analysis for the water body-pollutant combination(s) addressed by the program that demonstrates that the watershed control measures proposed in the program will be sufficient to control MS4 discharges such that they do not cause or contribute to an exceedance of the applicable receiving water limitation(s). Additionally, the Watershed Management Program must identify enforceable requirements and milestones and dates for their achievement to address the pollutants within a timeframe that is as short as possible. For pollutants that are in a similar class to those already addressed by a TMDL for the water body, the requirements, milestones and dates for their achievement must align with those established in the TMDL implementation schedule. A Permittee’s full compliance with all requirements and dates for their achievement in an approved Watershed Management Program will constitute compliance with the receiving water limitations in Part V.A. addressed by the program. Permittees that do not elect to develop a Watershed Management Program are required to demonstrate compliance with receiving water limitations pursuant to Part V.A.</p>	
<p>Compliance/Liability Fact Sheet - Rationale for Receiving Water Limitations</p>	<p>While the Fact Sheet states that each of the three provisions in the Permit’s RWL language “are independently applicable” (and thus enforceable), this very fact makes the Permit’s present RWL language untenable for Permittees. As</p>	<p>County of Los Angeles</p>	<p>As previously stated in these responses, the RWLs section is authorized by federal law. Further, the RWL section in this permit is consistent with the RWL section in the 2001 permit. Those RWLs provisions in the 2001 permit have been upheld by both a state court and a federal court. (<i>In re L.A. Cnty. Mun. Storm Water Permit Litig.</i>, No. BS 080548, at 4-5, 7 (L.A. Super. Ct., No. BS 080548, Mar. 24, 2005) Statement of Decision from Phase I Trial on Petitions for Writ of Mandate, pp. 4-5, 7; <i>NRDC v. County of Los Angeles</i> (2011) 673 F.3d 880, 886.) Permittees have</p>	<p>Revisions made to Part VI.C.</p>

	<p>demonstrated by the NRDC litigation itself, Permittees covered by the Order would have no protection against another citizens' suit (or possible enforcement action by the Board) for exceedances of water quality standards not subject to the TMDLs, exceedances that will occur as a result of the extreme variability and uncontrolled nature of municipal storm and non-stormwater discharges.</p>		<p>the necessary authority and ability to control discharges of pollutants from their MS4s to implement these provisions. Moreover, the Los Angeles County Superior Court found that "there was no issue of impossibility" in the requirements of the 2001 permit, including the RWLs. (<i>In re L.A. Cnty. Mun. Storm Water Permit Litig.</i>, No. BS 080548, at 4-5, 7 (L.A. Super. Ct., No. BS 080548, Mar. 24, 2005) Statement of Decision from Phase I Trial on Petitions for Writ of Mandate, p. 9.)</p> <p>Notwithstanding the above, for receiving water limitations for water body-pollutant combinations not addressed by a TMDL, the Order has been revised to allow Permittees to develop and implement a Watershed Management Program to address these receiving water limitations. The Watershed Management Program is a proactive and robust framework for identifying and implementing in a timely fashion, control measures for MS4 discharges such that they do not cause or contribute to exceedances of receiving water limitations. The Watershed Management Program must include, at the outset, a reasonable assurance analysis for the water body-pollutant combination(s) addressed by the program that demonstrates that the watershed control measures proposed in the program will be sufficient to control MS4 discharges such that they do not cause or contribute to an exceedance of the applicable receiving water limitation(s). Additionally, the Watershed Management Program must identify enforceable requirements and milestones and dates for their achievement to address the pollutants within a timeframe that is as short as possible. For pollutants that are in a similar class to those already addressed by a TMDL for the water body, the requirements, milestones and dates for their achievement must align with those established in the TMDL implementation schedule. A Permittee's full compliance with all requirements and dates for their achievement in an approved Watershed Management Program will constitute compliance with the receiving water limitations in Part</p>	
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			<p>V.A. addressed by the program. Permittees that do not elect to develop a Watershed Management Program are required to demonstrate compliance with receiving water limitations pursuant to Part V.A.</p>	
<p>Compliance/Liability</p>	<p>Municipalities cannot cause or exceed water quality standards in the basin plan as soon as this Permit is adopted. It is inherently unfair and poor public policy to put cities in non-compliance on day one of the Permit without the opportunity for the cities to develop a plan of action, develop source identification, and implement a plan to address the concern.</p>	<p>LA Permit Group; County of Los Angeles; Burbank; Downey; El Segundo; Inglewood; Malibu; Monterey Park; Peninsula Cities; Temple City; Torrance; SMBBB Detailed; Port of Stockton; Anaheim; Brisbane; Corona; Dana Point; Murrieta; Orange County DPW; City/County Association of Governments of San Mateo County (C/CAG); Santa Rosa; Irvine; National Association of Flood and Stormwater Management Agencies (NAFSMA)</p>	<p>The RWL section in this permit is consistent with the RWL section in the 2001 permit. Therefore, with regards to the RWL in this permit, the Board is not imposing new requirements. Moreover, the Los Angeles County Superior Court found that “there was no issue of impossibility” in the requirements of the 2001 permit, including the RWLs. (<i>In re L.A. Cnty. Mun. Storm Water Permit Litig.</i>, No. BS 080548, at 4-5, 7 (L.A. Super. Ct., No. BS 080548, Mar. 24, 2005) Statement of Decision from Phase I Trial on Petitions for Writ of Mandate, p. 9.)</p> <p>Notwithstanding the above, the majority of pollutants of concern from the Los Angeles County MS4 are addressed by the 33 TMDLs that are included in the order. The order provides that RWL exceedances for pollutants addressed by TMDLs will be addressed per TMDL specific compliance schedules, which are consistent with Board-adopted and fully approved TMDL implementation schedules. Therefore, Permittees will not be in non-compliance on day one of the permit with WQBELs and RWLs for which compliance deadlines occur in the future.</p> <p>For receiving water limitations for water body-pollutant combinations not addressed by a TMDL, the Order has been revised to allow Permittees to develop and implement a Watershed Management Program to address these receiving water limitations. The Watershed Management Program is a proactive and robust framework for identifying and implementing in a timely fashion, control measures for MS4 discharges such that they do not cause or contribute to exceedances of receiving water limitations. The Watershed Management Program must include, at the outset, a reasonable assurance analysis for the water body-pollutant combination(s) addressed by the program that demonstrates that the watershed control</p>	<p>Revisions made to Part VI.C.</p>

			<p>measures proposed in the program will be sufficient to control MS4 discharges such that they do not cause or contribute to an exceedance of the applicable receiving water limitation(s). Additionally, the Watershed Management Program must identify enforceable requirements and milestones and dates for their achievement to address the pollutants within a timeframe that is as short as possible. For pollutants that are in a similar class to those already addressed by a TMDL for the water body, the requirements, milestones and dates for their achievement must align with those established in the TMDL implementation schedule. A Permittee's full compliance with all requirements and dates for their achievement in an approved Watershed Management Program will constitute compliance with the receiving water limitations in Part V.A. addressed by the program. Permittees that do not elect to develop a Watershed Management Program are required to demonstrate compliance with receiving water limitations pursuant to Part V.A.</p>	
<p>Compliance/Liability</p>	<p>Permittees should be able to achieve compliance with the permit through a BMP-based iterative approach. Board staff previously indicated that it would not create a permit for which permittees would be out of compliance from the very first day the permit goes into effect. This means the permit cannot require immediate strict compliance with water quality standards. Otherwise, the iterative approach is meaningless.</p>	<p>Cities of Agoura Hills, Artesia, Beverly Hills, Hidden Hills, La Mirada, Monrovia, Norwalk, Rancho Palos Verdes, San Marino, South El Monte, and Westlake Village</p>	<p>For receiving water limitations for water body-pollutant combinations not addressed by a TMDL, the Order has been revised to allow Permittees to develop and implement a Watershed Management Program to address these receiving water limitations. The Watershed Management Program is a proactive and robust framework for identifying and implementing in a timely fashion, control measures for MS4 discharges such that they do not cause or contribute to exceedances of receiving water limitations. The Watershed Management Program must include, at the outset, a reasonable assurance analysis for the water body-pollutant combination(s) addressed by the program that demonstrates that the watershed control measures proposed in the program will be sufficient to control MS4 discharges such that they do not cause or contribute to an exceedance of the applicable receiving water limitation(s). Additionally, the Watershed Management Program must identify enforceable requirements and milestones and dates for their</p>	<p>Revisions made to Part VI.C.</p>

			<p>achievement to address the pollutants within a timeframe that is as short as possible. For pollutants that are in a similar class to those already addressed by a TMDL for the water body, the requirements, milestones and dates for their achievement must align with those established in the TMDL implementation schedule. A Permittee's full compliance with all requirements and dates for their achievement in an approved Watershed Management Program will constitute compliance with the receiving water limitations in Part V.A. addressed by the program. Permittees that do not elect to develop a Watershed Management Program are required to demonstrate compliance with receiving water limitations pursuant to Part V.A.</p>	
<p>Compliance/Liability</p>	<p>Compliance with water quality standards is an impossible standard for permittees to meet, especially given that thirty-three (33) TMDLs have been incorporated into the Permit. This means that numerous water bodies that currently do not meet water quality standards will be governed by the Permit and permittees will be subject to potential liability immediately.</p>	<p>Cities of Agoura Hills, Artesia, Beverly Hills, Hidden Hills, La Mirada, Monrovia, Norwalk, Rancho Palos Verdes, San Marino, South El Monte, and Westlake Village</p>	<p>The Board disagrees. The RWL section in this permit is consistent with the RWL section in the 2001 permit. The Los Angeles County Superior Court found that "there was no issue of impossibility" in the requirements of the 2001 permit, including the RWLs. (<i>In re L.A. Cnty. Mun. Storm Water Permit Litig.</i>, No. BS 080548, at 4-5, 7 (L.A. Super. Ct., No. BS 080548, Mar. 24, 2005) Statement of Decision from Phase I Trial on Petitions for Writ of Mandate, p. 9.)</p> <p>Further, the majority of pollutants of concern from the Permittees' MS4s are addressed by TMDLs. The tentative order provides these pollutants will be addressed per TMDL specific compliance schedules, which are consistent with Board-adopted and fully approved TMDL implementation schedules. These TMDL implementation schedules were developed to accommodate Permittees' efforts to achieve compliance with standards over time. Many of these implementation schedules have provided between 18 to 25 years to achieve compliance with the wasteload allocations assigned to storm water discharges from the MS4. To the extent that Permittees are making progress consistent with interim milestones Permittees will not be subject to immediate liability. Further, where final compliance deadlines have passed, the tentative order allows Permittees to request a time schedule order, where</p>	<p>Revisions made to Part VI.C. to address water body-pollutant combinations not otherwise addressed by a TMDL.</p>

			<p>justified, to provide more time to implement controls necessary to achieve compliance with final requirements.</p> <p>For receiving water limitations for water body-pollutant combinations not addressed by a TMDL, the Order has been revised to allow Permittees to develop and implement a Watershed Management Program to address these receiving water limitations. The Watershed Management Program is a proactive and robust framework for identifying and implementing in a timely fashion, control measures for MS4 discharges such that they do not cause or contribute to exceedances of receiving water limitations. A Permittee's full compliance with all requirements and dates for their achievement in an approved Watershed Management Program will constitute compliance with the receiving water limitations in Part V.A. addressed by the program.</p>	
<p>Compliance/Liability</p>	<p>The tentative order must be revised to enable compliance with TMDLs and other water quality standards through the SQMP/MCMs</p>	<p>Cities of: Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, San Gabriel and West Covina</p>	<p>Compliance with TMDL related provisions in Part VI.E. and Attachments L through R may be achieved using any lawful means. Where a Permittee demonstrates through a Reasonable Assurance Analysis that its storm water management program is sufficient to achieve the interim and final WQBELs, a Permittee may rely upon it to achieve the TMDL related requirements in the order. Permittees may demonstrate compliance with interim WQBELs in several ways, including through implementation of watershed control measures in an approved Watershed Management Program. To utilize this compliance demonstration pathway, the Watershed Management Program must include, at the outset, a reasonable assurance analysis for the water body-pollutant combination(s) addressed by the program that demonstrates that the watershed control measures proposed in the program will be sufficient to control MS4 discharges such that they do not cause or contribute to an exceedance of the applicable receiving water limitation(s). Additionally, the schedule for implementation of actions through a Watershed Management Program must be consistent with TMDL compliance schedules, or for other</p>	<p>Revisions made to Part VI.C.</p>

			<p>water body-pollutant combinations not addressed by a TMDL the timeframe for addressing MS4 discharges of the pollutant must be as short as possible.</p>	
<p>Compliance/Liability</p>	<p>Alternative approaches are available to address the concerns and maintain the intent of the language in the approach such as the draft language developed by the California Stormwater Quality Association (CASQA); we request that RWQCB utilize this alternative language.</p>	<p>LA Permit Group; County of Los Angeles; Bradbury; Burbank; Downey; El Segundo; Inglewood; La Verne; Malibu; Monterey Park; Peninsula Cities; Sierra Madre; Torrance; Signal Hill; SMBBB Detailed; Port of Stockton; Anaheim; Brisbane; Corona; Dana Point; Murrieta; Orange County DPW; City/County Association of Governments of San Mateo County (C/CAG); Santa Rosa; Irvine; National Association of Flood and Stormwater Management Agencies (NAFSMA); Sacramento Stormwater Quality Partnership; Ventura Countywide Stormwater Quality Management</p>	<p>The RWL provisions are consistent with the State Board precedential language of Order WQ 99-05, which was developed with input from USEPA. This language is the operative language used for MS4 permits in California at this time. The Regional Water Board may re-open the permit in consideration of any State Board action regarding the precedential language of State Board Order No. 99-05.</p> <p>The Board supports greater rigor and specificity in the iterative process. This rigor and specificity is provided in Part VI.E. and Attachments L through R for water body-pollutant combinations addressed by a TMDL. For receiving water limitations for water body-pollutant combinations not addressed by a TMDL, the Order has been revised to allow Permittees to develop and implement a Watershed Management Program to address these receiving water limitations. The Watershed Management Program is a proactive and robust framework for identifying and implementing in a timely fashion, control measures for MS4 discharges such that they do not cause or contribute to exceedances of receiving water limitations. The Watershed Management Program must include, at the outset, a reasonable assurance analysis for the water body-pollutant combination(s) addressed by the program that demonstrates that the watershed control measures proposed in the program will be sufficient to control MS4 discharges such that they do not cause or contribute to an exceedance of the applicable receiving water limitation(s). Additionally, the Watershed Management Program must identify enforceable requirements and milestones and dates for their achievement to address the pollutants within a timeframe that is as short as possible. For pollutants that are in a similar class to those already addressed by a TMDL for the water body, the requirements, milestones and dates for</p>	<p>Revisions made to Part VI.C.</p>

		<p>Program; Cities of: Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, San Gabriel, West Covina, Agoura Hills, Artesia, Beverly Hills, Hidden Hills, La Mirada, Monrovia, Norwalk, Rancho Palos Verdes, San Marino, South El Monte, and Westlake Village; West Hollywood</p>	<p>their achievement must align with those established in the TMDL implementation schedule. A Permittee’s full compliance with all requirements and dates for their achievement in an approved Watershed Management Program will constitute compliance with the receiving water limitations in Part V.A. addressed by the program.</p>	
<p>Liability- Pollutant Sources</p>	<p>USEPA’s November 12, 2010 memo is clear that an increased reliance on numerical values should be coupled with the “disaggregation” of different storm water sources within permits. The Permit currently aggregates multiple sources of storm water runoff while additionally imposing numeric standards. This will result in a system whereby the innocent will be punished alongside the guilty for numeric standard exceedances. The Board should not allow this inequitable and legally</p>	<p>Cities of Agoura Hills, Artesia, Beverly Hills, Hidden Hills, La Mirada, Monrovia, Norwalk, Rancho Palos Verdes, San Marino, South El Monte, and Westlake Village</p>	<p>The Board disagrees. The permittees have ultimate authority and responsibility to prohibit, prevent, or otherwise control discharges that enter and exit the portions of the MS4 for which they are owners and/or operators, even where the permittees discharge to a common conveyance system and receiving waters. The Regional Board does not expect that any measured numeric exceedance would necessarily constitute a permit violation by a particular Permittee. In determining whether a numeric exceedance constitutes a permit violation by any one Permittee, the Regional Board would consider all the available information, including other sources and the nature of the exceedance and the applicable requirement of the permit. The permit addresses this comment by allowing permittees who may have commingled discharges to establish a plan for determining compliance.</p>	<p>None</p>

	unjustifiable result to occur.			
Liability- Pollutant Sources	Another reason for adopting a BMP-based approach is the fact that new and existing conditionally exempt non-stormwater discharges may also contribute to measured exceedances. This inequitable result means the exempt discharges may nonetheless contribute to permittee liability.	Cities of Agoura Hills, Artesia, Beverly Hills, Hidden Hills, La Mirada, Monrovia, Norwalk, Rancho Palos Verdes, San Marino, South El Monte, and Westlake Village	There are no new categories of conditionally exempt non-storm water discharges in the order. Additionally, non-storm water discharges are only conditionally exempt if they are not a source of pollutants. If a conditionally exempt discharge is a source of pollutants, Permittees are required to address the discharge of pollutants in any one of several ways, pursuant to Part III.A.4.d. of the order. If an authorized or conditionally exempt essential non-storm water discharge (i.e. other NPDES permitted discharge, potable water discharge or fire fighting flow) causes an exceedance of receiving water limitations, the order states that upon such a demonstration by the Permittee, the Permittee would not be found in violation of the applicable receiving water limitation and/or water quality based effluent limitation, pursuant to Part III.A.5.	None
Relationship to WMP	<p>The RWL as written is contradictory to the Watershed Management Program.</p> <p>The RWL section turns upside down prioritization of efforts to reduce stormwater pollution by emphasizing those pollutants of less significance over those of greater significance. The permit should provide that pollutants not covered by TMDLs but whose presence violates RWLs be addressed by the Permittees in conjunction with their watershed management program</p>	LA Permit Group; City of Los Angeles; County of Los Angeles; Bradbury; Downey; La Verne; Monterey Park; LACFCD; County of Los Angeles	For receiving water limitations for water body-pollutant combinations not addressed by a TMDL, the Order has been revised to allow Permittees to develop and implement a Watershed Management Program to address these receiving water limitations. The Watershed Management Program is a proactive and robust framework for identifying and implementing in a timely fashion, control measures for MS4 discharges such that they do not cause or contribute to exceedances of receiving water limitations. The Watershed Management Program must include, at the outset, a reasonable assurance analysis for the water body-pollutant combination(s) addressed by the program that demonstrates that the watershed control measures proposed in the program will be sufficient to control MS4 discharges such that they do not cause or contribute to an exceedance of the applicable receiving water limitation(s). Additionally, the Watershed Management Program must identify enforceable requirements and milestones and dates for their achievement to address the pollutants within a timeframe that is as short as possible. For pollutants that are in a	Revisions made to Part VI.C.

	<p>when one is being developed or exists, and compliance with that watershed management program is compliance with RWLs. By doing so, Permittees can incorporate and prioritize their efforts to address exceedances of non TMDL pollutants with their efforts to address pollutants addressed by TMDLs.</p>		<p>similar class to those already addressed by a TMDL for the water body, the requirements, milestones and dates for their achievement must align with those established in the TMDL implementation schedule. A Permittee's full compliance with all requirements and dates for their achievement in an approved Watershed Management Program will constitute compliance with the receiving water limitations in Part V.A. addressed by the program.</p>	
<p>Relationship to WMP</p>	<p>The RWL section fails to provide any incentive for innovative programs that might address exceedances of RWLs. The Board should include an incentive to develop new, innovative approaches, particularly those that will result in greater infiltration of stormwater before it reaches the MS4. A paragraph should be added to this section that would provide that a Permittee can be deemed in compliance if it is developing projects that will result in greater infiltration of stormwater in the watersheds where the RWLs are being exceeded.</p>	<p>LACFCD; County of Los Angeles</p>	<p>The tentative order has been revised to provide Permittees with the option to develop an <i>enhanced</i> Watershed Management Program. An <i>enhanced</i> Watershed Management Program is one that comprehensively evaluates opportunities, with the participating Permittees' collective jurisdictional area in a Watershed Management Area, for collaboration among Permittees and other partners on multi-benefit regional projects to control MS4 discharges of storm water by, wherever feasible, retaining the 85th percentile, 24-hour storm event for the drainage areas tributary to the projects, while also achieving other benefits including flood control and water supply, among others. Where retention of the 85th percentile, 24-hour storm event is not feasible, the <i>enhanced</i> Watershed Management Program shall include a Reasonable Assurance Analysis to demonstrate that applicable water quality based effluent limitations and receiving water limitations shall be achieved through implementation of other watershed control measures. Permittees who elect to participate in such a program will be provided with a longer time period to develop an <i>enhanced</i> Watershed Management Program in recognition of the time necessary to establish partnerships, provide opportunities for meaningful stakeholder involvement and plan regional, multi-benefit projects. However, these programs must ensure that requirements to comply with (1) technology</p>	<p>Revisions made to Part VI.C.</p>

			<p>based standards (i.e. MEP), (2) other core provisions (e.g., elimination of non-storm water discharges of pollutants), and (3) WQBELs and RWL pursuant to TMDL compliance schedules with deadlines occurring prior to final approval of the enhanced WMP are not delayed. Further, Permittees must implement some early actions related to LID in order to be afforded the additional time to develop an enhanced WMP.</p>	
<p>Relationship to WMP</p>	<p>Part V should include the following paragraph: In lieu of preparing an integrated monitoring compliance report set forth in Part V.A.3.a. a Permittee may address discharges from the MS4 that cause or contribute to a violation of receiving water limitations in their watershed management program applicable to the receiving water. The Permittee shall not be considered to be in violation of Part V.A. of this Order if it is in compliance with that watershed management program. Part V should also add the following: If a Permittee is found to have discharges from its MS4 causing or contributing to an exceedance of an</p>	<p>LACFCD; County of Los Angeles</p>	<p>For receiving water limitations for water body-pollutant combinations not addressed by a TMDL, Part VI.C. of the Order has been revised to allow Permittees to develop and implement a Watershed Management Program to address these receiving water limitations. The Watershed Management Program is a proactive and robust framework for identifying and implementing in a timely fashion, control measures for MS4 discharges such that they do not cause or contribute to exceedances of receiving water limitations. A Permittee’s full compliance with all requirements and dates for their achievement in an approved Watershed Management Program will constitute compliance with the receiving water limitations in Part V.A. addressed by the program.</p> <p>Permittees that do not elect to develop and implement a WMP, or who fail to fully comply with all the requirements of an approved WMP, are subject to the provisions of Part V.A.</p>	<p>Revisions made to Part VI.C.</p>

	<p>applicable water quality standard or causing a condition of nuisance in the receiving water, the Permittee shall be deemed in compliance with Parts 1 and 2 above, unless it fails to implement the requirements provided in Parts 3 and 4 as otherwise covered by a provision of this order specifically addressing the constituent in question, as applicable.</p> <p>Alternatively, LACFCD is supportive of the proposed CASQA RWLs language</p>			
<p>Definition of Receiving Water Limitation</p>	<p>The tentative order has altered Receiving Water Limitation (RWL) language causing it to be overbroad and inconsistent with RWL in the current MS4 permit, the Ventura MS4 permit, State Board WQO 99-05, the draft Caltrans MS4 permit, and RWL language recommended by CASQA. Regional Board does not have the legal authority to re-define RWL language to the extent it is proposing.</p>	<p>Cities of: Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, San Gabriel and West Covina; County of Los Angeles</p>	<p>The RWL language in the order is consistent with the State Board’s precedential order WQ 99-05 and is nearly identical to the language of the 2001 Permit, which has also been upheld by a state court and a federal court. The change from “Water Quality Standards or water quality objectives” used in the 2001 Permit to “receiving water limitations” in Part V.A. of the order does not represent a substantive change or expansion of the State Water Board’s precedential language, and was made for clarity. The order includes a definition of “receiving water limitation” that clearly identifies a receiving water limitation as any applicable water quality objective or criterion. To avoid any confusion over the different terminology used by USEPA and the State of California for regulatory thresholds for water quality established pursuant to CWA section 303(c), i.e., “water quality</p>	<p>None</p>

			criteria” and “water quality objectives,” respectively, the Regional Board chose to refer to these thresholds collectively as “receiving water limitations.” The commenter misreads the scope of the reference to federal regulations; the reference is to federal regulations <i>that promulgate water quality criteria</i> such as 40 CFR section 131.38 (that promulgated federal water quality criteria for priority pollutants applicable to California). Thus, the receiving water limitations in the order are equivalent to State adopted or federally promulgated water quality standards applicable to the water body, or limitations to implement the applicable water quality standards such as receiving water conditions established through TMDLs. Further, the reference to water quality control plans or policies adopted by the State Water Board is necessary because in some cases the State Board has established water quality objectives through policies rather than water quality control plans.	
Definition of Receiving Water Limitation	The reference to “policies” adopted by the State Board is ambiguous. The State Board adopts water quality objectives and water quality control plans, not policy resolutions. It is not clear what is meant by policies. The reference to “policies” adopted by the State Board should be deleted from the definition.	LACFCD; County of Los Angeles	The reference to water quality control plans or policies adopted by the State Water Board is necessary because in some cases the State Board has established water quality objectives through policies rather than water quality control plans .	None
Definition of Receiving Water Limitation	The definition should not reference “criterion” under federal regulations. A Permittee is only required to comply with water quality standards adopted by the state or federal government that are	LACFCD; County of Los Angeles	Water quality criteria as used in the order refer to the regulatory thresholds for water quality established pursuant to CWA section 303(c). Such criteria, such as those established in the California Toxics Rule (40 CFR section 131.38) are applicable water quality objectives that Permittees must comply with. The commenter may be confusing federally promulgated water quality criteria pursuant to CWA section 303(c) with USEPA	None

	applicable to the particular waterbody. The definition could be construed as referring to criteria with which Permittees are not required to comply. The reference to “criterion” should be deleted from the definition.		recommended water quality criteria pursuant to CWA section 304(a).	
Definition of Receiving Water Limitation	The permit is ambiguous as to what constitutes a receiving water and what constitutes a municipal separate storm sewer. Recommend adding the underlined sentence to the definition of receiving water so that it reads as follows: A “water of the United States” into which waste and/or pollutants are or may be discharged. <u>All waters of the United States for which beneficial uses are designated in the Basin Plan are receiving waters under this Order and not municipal separate storm sewers.</u>	County of Los Angeles	The permit is not ambiguous. Attachment A clearly defines what is considered a receiving water and what is considered a MS4.	None
General	Footnote 22 has a citation that doesn't exist in 40 CFR; please verify the citation and clarify	City of Santa Clarita Detailed	The citation in the footnote is correct – 40 CFR section 122.26(a)(3)(vi).	None
General	Do we need to submit a formal revised plan document or do we document the revisions internally? What about the	City of Santa Monica Detailed	Part V.A.3.a requires submittal of an Integrated Monitoring Compliance Report to the Regional Water Board. The report is described in Attachment E, Part XVIII.A.5, and must include a description of current BMPs and additional BMPs, including modifications to	None

	implementation schedule?		current BMPs that will be implemented to prevent or reduce the discharge of any pollutants that are causing or contributing to the exceedances of receiving water limitations. Reports are due annually.	
General	<p>Thirty days does not provide sufficient time to do the data analysis and determination.</p> <p>For footnote 23, revise to read: “Within 90 days of receipt of analytical results from the sampling date.”</p>	County of Los Angeles; LACFCD	The order will be revised to remove the requirement to report within 30 days. Permittees should report semi-annually consistent with requirements in the revised MRP-Attachment E, Part XIV.M.	Language will be revised.

**California Regional Water Quality Control Board, Los Angeles Region
 Los Angeles County MS4 Permit
 Response to Comments on the Tentative Order
 MONITORING AND REPORTING PROGRAM MATRIX**

Section/Topic	Comment Summary	Commenter(s)	Response	Change Made
<i>General</i>				
General	<p>The monitoring and reporting program requirements were not developed in accordance with law, as the Board has failed to comply with Water Code sections 13267, 13225, and 13165. The Board must conduct a cost/benefit analysis and find that the burden, including the costs of these requirements, "bear a reasonable relationship" to their need.</p>	<p>Signal Hill; BILD</p>	<p>The Board disagrees with the commenters' statements that a cost/benefit analysis must be conducted before any monitoring and reporting requirements are imposed. The monitoring and reporting program requirements are included in the permit pursuant to the Board's authority under the Clean Water Act and its regulations, as well as California Water Code section 13383. Section 308(a) of the federal Clean Water Act and sections 122.41(h), (j)-(l), 122.44(i), and 122.48 of Title 40 of the Code of Regulations require that all NPDES permits specify monitoring and reporting requirements. Federal regulations applicable to large and medium MS4s also require monitoring and reporting. (See 40 C.F.R. §§ 122.26(d)(2)(i)(F) & (d)(2)(iii)(D), 122.42(c).) Thus, federal law mandates that the Regional Water Board require a monitoring and reporting program, and the federal authority does not suggest or require an additional cost/benefit analysis in imposing the monitoring and reporting program.</p> <p>The California Porter-Cologne Water Quality Control Act contains a special chapter, Chapter 5.5, which addresses Clean Water Act permits. As part of this Chapter, Water Code section 13383 governs monitoring and reporting requirements. Section 13383, like the federal Clean Water Act, does not mention or suggest or require a cost/benefit analysis to justify the inclusion of monitoring and reporting provisions in a permit.</p> <p>Water Code sections 13165, 13225, and 13267 do not apply to the monitoring and reporting requirements in this</p>	<p>Clarifying language added. References to California Water Code section 13267 deleted.</p>

			<p>permit. Instead, Water Code section 13383 governs the permitting process here. The general authority to require monitoring and reporting afforded by Water Code sections 13165, 13225, and 13267 does not trump the more specific authority the Board has in the context of issuing NPDES permits. Because the monitoring and reporting program requirements are required by federal law, any conflicting state law is preempted. (See <i>Silkwood v. Kerr-McGee Corp.</i> (1984) 464 U.S. 238, 248 [“state law is still preempted . . . where the state law stands as an obstacle of the full purposes and objectives of Congress.”]; see also Wat. Code, §§ 13370, 13377.) Therefore, the Board need not determine that the burden, including the costs of the reports, bear a reasonable relationship to the need for the report and the benefits to be obtained.</p> <p>During the litigation on the 2001 permit, similar arguments concerning the monitoring and reporting program were made by several permittees. The Los Angeles County Superior Court specifically considered and rejected these arguments, and upheld the Board’s authority to require monitoring and reporting without a cost/benefit analysis. (<i>In re Los Angeles County Municipal Storm Water Permit Litigation</i> (Sup. Ct. Los Angeles County, March 24, 2005, Case No. BS 080548), Statement of Decision from Phase II Trial on Petitions for Writ of Mandate, pp. 19-20.)</p> <p>References to Water Code section 13267 as authority to require monitoring and reporting were unnecessarily included in the tentative permit. In order to provide greater clarity concerning the Board’s authority to require monitoring and reporting, references to Water Code section 13267 have been deleted from the tentative permit, with the exception of provisions related to inspection and entry.</p>	
Receiving Water and Outfall	There is no consistency in the naming conventions of wet weather monitoring, stormwater monitoring, dry weather	County of Los Angeles	Storm water and non-storm water are used in the context of outfall monitoring, as these terms refer to the type of discharge from the MS4. These terms are defined in	None

Monitoring	<p>monitoring, non-stormwater monitoring. For example, Part VI.C. is called “Minimum Wet Weather Receiving Water Monitoring Requirements” while Part VIII. is called “Storm Water Outfall Based Monitoring.” It is not clear whether “Wet Weather” and “Storm water” are being used interchangeably. If yes, the Permit should be revised so only one term is used. Otherwise, define both terms. This concern also applies to “Dry Weather” and “Non-Storm Water.” Recommendation: Be consistent in the use of terminology, or clearly define terms if they are not interchangeable</p>		<p>Attachment A of the Tentative Order. Wet-weather and dry-weather monitoring are used in the context of receiving water monitoring and describe the conditions under which the receiving water monitoring is to be conducted. Wet and dry weather conditions for monitoring are specified in Attachment E – MRP of the Tentative Order.</p>	
Rain Gages	<p>Throughout Attachment E there are references to measuring and reporting rainfall totals (or making monitoring decisions based on rainfall amounts). The rain gauges to be used for determining a wet versus dry weather day should be selected by the agencies and approved by the Regional Board. Since monitoring plans will be on a regional basis the use of 50% of County rain gages in a watershed may not be necessary. Plus, predictions do not necessarily use County rain gages.</p>	<p>LA Permit Group (Comment 2); South Bay Cities; County of Los Angeles</p>	<p>The rain gauges may be selected by the Permittees as part of the IMP and CIMP development process. The permit has been revised to clarify that Permittees may propose alternate rain gauges that provide representative data to determine wet or dry weather conditions for purposes of monitoring, subject to public review and Executive Officer approval.</p> <p>The language requiring 50% of County rain gages in a watershed has been revised to allow alternative approaches if it can be demonstrated that information used is equivalent or more accurate.</p>	<p>Language revised.</p>
General	<p>The MRP does not include Southern California Bight Monitoring Requirements, as the Ventura MS4 includes. What is the Board’s reasoning for this difference?</p>	<p>Environmental Groups</p>	<p>In the past, the Principal Permittee was assigned the responsibility to participate in the Southern California Bight Steering Committee. The Regional Board has eliminated this requirement in the Tentative Order in light of the fact that there is no designated Principal Permittee in the Tentative Order.</p>	<p>None</p>
General	<p>The use of the HUC-12 watershed for</p>	<p>LA Permit</p>	<p>The USGS Hydrologic Unit Classification (HUC) system</p>	<p>Language</p>

	<p>limits is a good start but there needs to be some flexibility in its use to insure that the HUC-12 truly reflects the actual watershed boundary.</p>	<p>Group (Comment 1)</p>	<p>is the basis for the watershed boundaries in the Basin Plan; therefore, it is an appropriate classification system for identifying watershed-based monitoring locations. Permittees may propose an alternate monitoring program that provides adequately representative data for the receiving waters to which it discharges. This plan is subject to public review and Executive Officer approval.</p> <p>Flexibility is provided to propose alternate approaches in an IMP or CIMP developed in conjunction with a Watershed Management Program (see Part VI.B).</p>	<p>revised</p>
<p>General</p>	<p>The MRP should allow for modification of monitoring requirements to focus efforts on watershed priorities. The WMP will identify specific priorities based on TMDLs and 303(d) Listings, which will allow MS4s to tailor monitoring to address the Primary Objectives and provide data to support management decisions. As currently written, there does not appear sufficient flexibility to modify monitoring requirements. This is of particular concern for the outfall monitoring requirements, which, as currently written, will require a significant level of resources without clear benefit to addressing receiving water issues. Flexibility is requested for a customized monitoring program to support the Watershed Management Programs. As such, the City requests that the following language regarding flexibility, consistent with the language and approach used for the minimum control measures, is added to Part VI.B. of the Order: “Dischargers shall comply with the</p>	<p>City of Los Angeles (Comments 15 & 79)</p>	<p>The Tentative Order has been revised to provide Permittees the flexibility to submit a customized integrated monitoring program in conjunction with a Watershed Management Program, subject to public review and Executive Officer approval. Although flexibility and customization are provided for, all monitoring objectives and monitoring elements must be addressed by the plans</p>	<p>Language revised</p>

	MRP and future revisions thereto, in Attachment E, <u>or may in lieu of the requirements in Attachment E, implement a customized monitoring program as set forth in an approved Watershed Management Program per Part VI.C. of this Order.</u>			
Part II.A.1.	Omit as a primary objective to assess the “biological impacts” of discharges from the MS4. The MS4 Permit is to regulate water quality. It is the role of the State EPA and Water Quality Control Board, not municipal governments, to assess biological impacts of discharges and to set water quality regulations to prevent adverse biological impacts. This imposing of State responsibilities beyond Federal requirements on local municipal governments is an unfunded mandate. Please provide legal justification for this transfer of jurisdiction.	LA Permit Group (Comment 3); City of Vernon	The objective of the Federal Clean Water Act is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters (CWA section 101(a)). The requirement for Permittees to assess biological impacts of MS4 discharges on receiving waters is consistent with this objective. Beneficial uses, including many related to biological use protection, are a critical component of water quality standards. Biological assessment is necessary to evaluate cumulative effects of multiple pollutants discharged from the MS4. This provision is required and/or authorized by federal law. (CWA section 308(a); 40 CFR sections 122.26(d)(2)(i)(F) and (d)(2)(iii)(D), 122.41(h), (j)-(l), 122.42(c), 122.44(i), and 122.48.) The Board has determined that this provision is necessary to determine compliance with the conditions of this permit and to determine the impacts of the permittees’ discharges on receiving waters. Therefore, this requirement is not an unfunded state mandate.	None
Part II.E.1.	Monitoring requirements relative to MS4 permits are limited to effluent discharges and the ambient condition of the receiving water, as §122.22(C)(3) indicates: <i>The permit requires all effluent and ambient monitoring necessary to show that during the term of the permit the limit on the indicator parameters continues to attain water quality</i>	LA Permit Group (Comment 4); Cities of Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, San	The Regional Board disagrees that monitoring requirements relative to MS4 permits must be limited to effluent and ambient monitoring. Monitoring by the owners and/operators of MS4s is required pursuant to Clean Water Act section 308(a) and 40 CFR sections 122.41(h), (j)-(l), 122.44(i), 122.48, 122.26(d)(2)(i)(F), 122.26(d)(2)(iii)(D) and 122.42(c). 40 CFR section 122.26(d)(2)(iii)(D) identifies monitoring at outfalls, field screening points, and in-stream stations, and requires representative data collection. Wet weather receiving water monitoring (i.e. wet weather in-stream monitoring)	None

	<p><i>standards.</i></p> <p>The only definition of "ambient" monitoring is defined by SWAMP protocol as being 72 hours after a storm event.</p> <p>Regarding monitoring purposes "b" and "c" assessing trends in pollution concentrations should be: (1) limited to ambient water quality monitoring; and (2) Regional Board's surface water ambient monitoring program (SWAMP) should be charged with this responsibility. MS4 permittees fund SWAMP activities through an annual surcharge levied on annual MS4 permit fees.</p> <p><i>Recommended Corrective Action:</i> Clarify that RWL monitoring is only in the ambient condition as defined by SWAMP and that ambient monitoring is performed as part of the SWAMP and is not the responsibility of MS4 Permittees.</p>	<p>Gabriel and West Covina</p>	<p>is necessary to assist in the evaluation of the effects of storm water discharges on in-stream water quality. Wet weather receiving water monitoring is also necessary to assess trends in the effect of storm water discharges on in-stream water quality over time as Permittees implement additional and/or enhanced storm water control measures. Ambient monitoring conducted under SWAMP does not support these types of evaluation and would not be representative of the impacts of storm water discharges on the receiving waters. In-stream monitoring, referred to in the Tentative Order as receiving water monitoring, is also well established and supported by EPA's Part 2 MS4 permit application guide (EPA 833-B-92-002) and has been a part of the Los Angeles County MS4 program for more than ten years.</p> <p>Further, the commenters' reference to § 122.22(C)(3) is not only inapplicable to this case, but the citation is also incorrect. The Board believes that the correct citation for the quoted language is 40 CFR section 122.44(d)(1)(vi)(C)(3). That section applies to situations where a State has not established a water quality objective for a pollutant present in an effluent and establishes effluent limitations for an indicator parameter for the pollutant of concern. In this Order, the receiving water limitations and water quality based effluent limitations are derived from state or federally established water quality objectives. Therefore, the commenters' reference offers no support for their assertion.</p> <p>Lastly, Permittees may demonstrate compliance with the receiving water limitations provisions through either outfall monitoring or receiving water monitoring. If a Permittee's discharge quality as measured at the outfall does not exceed applicable WQBELs or receiving water limitations, then that provides a demonstration that the discharge did not cause or contribute to an exceedance of receiving water limitations.</p>	
<p>Part II.E.1.c.</p>	<p>Omit Item c. The MS4 Permit is to</p>	<p>LA Permit</p>	<p>The objective of the Federal Clean Water Act is to restore</p>	<p>None</p>

	<p>regulate water quality. It is the role of the State EPA and Water Quality Control Board, not municipal governments, to “Determine whether the designated beneficial uses are fully supported as ...aquatic toxicity and bio-assessment monitoring.” This imposing of State responsibilities beyond Federal requirements on local municipal governments is an unfunded mandate. Please provide legal justification for this transfer of jurisdiction.</p>	<p>Group (Comment 5)</p>	<p>and maintain the chemical, physical, and biological integrity of the Nation's waters (CWA section 101(a)). States implement the water quality standards program by designating beneficial uses, adoption of water quality objectives, and implementing programs (including permitting) in order to ensure compliance with these standards. The requirement for Permittees to assess biological impacts of MS4 discharges on receiving waters, including measuring aquatic toxicity and the health of the biological community, is consistent with this objective. Biological assessment and aquatic toxicity monitoring is necessary to evaluate cumulative effects of multiple pollutants discharged from the MS4.</p> <p>This provision is required and/or authorized by federal law. (CWA section 308(a); 40 CFR sections 122.26(d)(2)(i)(F) and (d)(2)(iii)(D), 122.41(h), (j)-(l), 122.42(c), 122.44(i), and 122.48.) The Board has determined that this provision is necessary to determine compliance with the conditions of this permit and to determine the impacts of the permittees’ discharges on receiving waters. Therefore, this requirement is not an unfunded state mandate.</p>	
<p>Part II.E.2.a.</p>	<p>Outfall monitoring for stormwater for attainment of municipal action levels (MALs) would be acceptable were it not for their purpose. MALs represent an additional monitoring requirement for non-TMDL pollutants. MALs should really be used to monitor progress towards achieving TMDL WLAs that are expressed in the receiving water. Instead, Regional Board staff has chosen to create another monitoring requirement, without regard for cost or benefit to water quality or to Permittees. Non-TMDL pollutants should not be given special monitoring attention until it has</p>	<p>LA Permit Group (Comment 6); Cities of Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, San Gabriel and West Covina</p>	<p>The commenters misunderstand the use of MALs. Attachment G contains two types of action levels.</p> <p>The non-storm water action levels are derived from the applicable water quality objectives and are used as triggers for Permittees to verify that their program is effectively controlling unauthorized non-storm water. If a non-storm water discharge is a source of pollutants, it is considered an unauthorized non-storm water discharge. These illicit discharges are prohibited under federal law and in the Order. Therefore, it is appropriate to set the non-storm water action levels based on the prevailing water quality objectives. Non-storm water action levels are used where there is no applicable TMDL-based WQBEL for the pollutant in that waterbody. These non-storm water action levels will support implementation of</p>	<p>None</p>

<p>been determined that they pose an impairment threat to a beneficial use. Such a determination needs to be done by way of ambient monitoring performed by the Regional Board SWAMP. The resulting data could then be used to develop future TMDLs, if necessary.</p> <p>Furthermore, many of the MAL constituents (both stormwater and non-storm water) listed in Appendix G, are included in several TMDLs such as metals and bacteria. This is, of course, a consequence of the redundancy created by two approaches that are intended to serve the same purpose: protection of water quality.</p> <p><i>Recommended Correction:</i> Either utilize MALs, in lieu of numeric WQBELs, to measure progress towards achieving TMDL WLAs expressed in the receiving water or eliminate MALs entirely.</p>			<p>the requirement to effectively prohibit non-storm water discharges of pollutants through the MS4 and implementation of Permittees’ illicit connection/illicit discharge elimination programs.</p> <p>The second type of action levels in Attachment G are municipal action levels (MALs). Municipal action levels are based on nationwide Phase I MS4 monitoring data for pollutants in storm water, and computed as the upper 25th percentile concentration – representing an “upset” value, i.e. a pollutant concentration in the storm water discharge that is significantly higher than the average concentration in storm water. MALs are used as a trigger to determine the efficacy of storm water BMPs and, in particular, to identify drainages with below average storm water discharge quality that should be prioritized for additional or enhanced BMPs. MALs have been endorsed by the State Board Blue Ribbon Panel as an effective tool for identifying “bad actor” catchments that should receive additional attention. Because MALs are derived from a statistical analysis of actual storm water quality, they do not have any relationship, in terms of their derivation, to WQBELs, which are derived from water quality standards. Therefore, MALs cannot replace the WQBELs established to implement TMDL WLAs. MALs are not consistent with the assumptions and requirements of TMDL WLAs, and are derived in a completely different manner, and for a very different purpose than the numeric WQBELs to implement TMDL WLAs. The Regional Water Board has included MALs in the Tentative Order as a tool for prioritizing implementation of storm water controls and as one metric for evaluating storm water discharges relative to the MEP standard.</p> <p>Monitoring of pollutants that are already impairing waters or may pose a threat to impairing waters is required. Non-storm water action levels were established in the draft Order after evaluating dry weather data collected by the Permittees from 2005-2011. These data indicate frequent exceedances of receiving water limitations during dry</p>	
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			<p>weather.</p> <p>It is the obligation of entities that discharge to receiving waters to monitor to assess compliance with permit requirements, including the requirement to prohibit non-storm water discharges that are a source of pollutants and to implement storm water controls to the MEP, as well as to assess threats to water quality from the discharge, and to assess progress in remedying impacts from the discharge.</p>	
Parts II.E.2.b. and II.E.3.a.	<p>Determining compliance with applicable wet weather or dry weather WQBELs derived from TMDL WLAs is only necessary when the final compliance date is within this Permit term. As the collection of such data is costly, it should only be required if (1) the Permittee elects to assess compliance at the outfall in lieu of the receiving water and (2) if the final TMDL compliance date is within the Permit term.</p>	<p>City of Los Angeles (Comments 80 & 81)</p>	<p>The Regional Board disagrees. The tentative order allows Permittees to demonstrate compliance with the interim WQBELs in any one of several ways, including through the use of outfall monitoring. Monitoring is necessary, even when final compliance dates are beyond the term of the order. Monitoring is necessary to assess compliance with interim WQBELs and, where a Permittee or Permittees are implementing an approved WMP, monitoring is still necessary to evaluate the overall effectiveness of the chosen implementation measures included in the WMP and inform modifications to the WMP to ensure adequate progress towards achieving compliance with interim and/or final WQBELs.</p> <p>Within the MRP, the Permittee(s) has flexibility to coordinate outfall monitoring with previously approved TMDL Monitoring Plans, thus reducing costs.</p>	None
Part II.E.3.a.	<p>Regarding “a,” This requirement is redundant in view of the aforementioned MALs and in any case is not authorized under federal stormwater regulations. 402(p)(B)(ii) of the Clean Water Act only prohibits discharges to the MS4 (streets, catch basins, storm drains and intra MS4 channels), not through or from it. This applies to all water quality standards, including TMDLs. Nevertheless,</p>	<p>LA Permit Group (Comment 7); Cities of Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, San</p>	<p>The Regional Board disagrees. This objective is not redundant with the inclusion of MALs in the Tentative Order. To the extent that the commenter is referring to MALs, the derivation of MALs is based on a statistical analysis of data on actual storm water quality, while WQBELs are derived from TMDL WLAs, which are based on water quality standards. Furthermore, MALs are applicable to storm water, not non-storm water. Part II.E.3 identifies the objectives of the <u>non-storm water</u> outfall based monitoring program.</p>	None

	<p>compliance with dry weather WQBELs can be achieved through BMPs and other requirements called for under the illicit connection and discharge detection and elimination (ICDDE) program, or requiring impermissible non-stormwater discharges to obtain coverage under a permit issued by the Regional Board.</p> <p><i>Recommended Correction:</i> Delete this requirement and specify compliance with dry weather WLAs, expressed in ambient terms, through the implementation of the IC/ID program.</p>	<p>Gabriel and West Covina</p>	<p>Regarding WQBELs applicable to non-storm water discharges, TMDL WLAs must be assigned to all discharges identified as pollutant sources contributing to the water quality impairment in the TMDL source analysis, and NPDES permits must include requirements consistent with the assumptions and requirements of all available WLAs. Non-storm water discharges from the MS4 have been identified in numerous TMDLs as a source of pollutants to receiving waters. The WQBELs included in the Order were derived from and are consistent with the assumptions and requirements of the TMDL WLAs. Further, CWA section 402(p)(3)(B)(iii) allows the Board, as the permitting agency to include in the MS4 permit “such other provisions as the [Board] determines appropriate for the control of such pollutants.” The non-storm water action levels are derived from the applicable water quality objectives and criteria and are used as triggers for Permittees to verify that their program is effectively controlling unauthorized non-storm water where there are not applicable WQBELs for the pollutant derived from a TMDL. Therefore, it is appropriate to set the non-storm water action levels based on the water quality objectives/criteria.</p> <p>The Regional Water Board is supportive of Permittees’ efforts to address non-storm water discharges through their illicit connection/illicit discharge elimination programs; however, to the extent that these discharges are not effectively prohibited from the MS4, the quality of the discharges must be regulated at the point of discharge to the receiving water.</p>	
<p>Part II.E.3.b.</p>	<p>With regard to “b”, see previous responses regarding MALs and the limitation of the non-stormwater discharge prohibition to the MS4.</p> <p><i>Recommended Correction:</i> Delete this requirement because it exceeds the non-stormwater discharge prohibition</p>	<p>LA Permit Group (Comment 8); Cities of Baldwin Park, Carson, Covina, Duarte, Glendora,</p>	<p>MS4 Permittees are required to effectively prohibit discharges of non-storm water to the MS4. Non-storm water discharges from the MS4 that are not authorized by separate NPDES permits, nor specifically exempted, are subject to requirements under the NPDES program, including discharge prohibitions, technology-based effluent limitations and water quality-based effluent limitations. (40 C.F.R. § 122.44.) Thus, the Board can</p>	<p>None</p>

	to the MS4; and determine whether MALs or TMDLs are to be used to protect receiving water quality.	Irwindale, Lawndale, Pico Rivera, San Gabriel and West Covina	establish requirements that are designed to reduce pollutants in non-storm water from the MS4 to receiving water and to ensure that non-storm water discharges from the MS4 do not cause or contribute to an exceedance of receiving water limitations. Discharges of non-storm water from the MS4 must be assessed to determine if they contribute pollutants to receiving waters. To the extent that non-storm water discharges contribute pollutants to receiving water, the discharge must be eliminated or otherwise controlled such that it is not a source of pollutants.	
Part II.E.3.c.	Regarding “c”, as mentioned, non-stormwater discharges cannot be applied to receiving water limitations because they are only prohibited to the MS4, not from or through it. <i>Recommended Correction:</i> Delete this requirement because it exceeds the non-stormwater discharge prohibition to the MS4.	LA Permit Group (Comment 9); Cities of Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, San Gabriel and West Covina	Non-storm water outfall monitoring is necessary to evaluate the impact of the non-storm water discharges from the MS4 on receiving water quality. The separate requirement to effectively prohibit non-storm water discharges to the MS4 does not bar the Regional Water Board from including requirements for monitoring of non-storm water discharges from the MS4 to assess their impact on receiving water quality. Monitoring of discharges from the MS4 is required by 40 CFR sections 122.26(d)(1)(iv)(D)-(E) and 122.26(d)(2)(iii)(A)(4) among other authorities. Such monitoring will assist in determining whether the permittees have effectively prohibited non-storm water discharges into the MS4 and whether conditionally exempt non-storm water discharges are having an impact on receiving water quality.	None
Part II.E.4.	The information that is expected be generated to evaluate the effectiveness of new development/re-development (Attachment E. Part X) is focused on tracking and documenting the each new development/re-development subject to the requirements of Part VI.D.6 of the Order. As such, the monitoring program elements in Attachment E. Part II should be consistent. Please revise Part II.E.4 as follows: New Development/Re-development	City of Los Angeles (Comment 82)	The Regional Board agrees with the changes suggested.	Revisions to Attachment E-MRP, Part II.E.4

	<p>effectiveness monitoring <u>tracking</u>. The objective of best management practices (BMP) effectiveness monitoring <u>tracking</u> is to determine <u>track</u> whether the <u>conditions in the building permit issued by the Permittee are implemented to ensure the volume of storm water associated with the design storm is retained on-site as required by Part VI.D.6.c.i of this Order, and as conditioned in the building permit issued by the Permittee.</u></p>			
<p>Part II.E.4.</p>	<p>Omit the requirement II.E.4. Monitoring of Development/Re-development BMPs is the responsibility of the Developers. Requirements for monitoring Developer BMPs should be part of Section VI.D.6. <i>Planning and Land Development Program</i> and the responsibility of the Developer.</p> <p>The purpose of this requirement is not authorized under federal stormwater regulations as it relates to monitoring. Requiring such monitoring is premature given the absence of outfall monitoring in the current and previous MS4 permits that would characterize an MS4's pollution contribution relative to exceeding ambient water quality standards. There is nothing in federal stormwater regulations that require monitoring on private or public property. Monitoring, once again, is limited to effluent discharges at the outfall and to ambient monitoring in</p>	<p>LA Permit Group (Comment 10)</p>	<p>The Regional Board disagrees. Federal regulations require monitoring and reporting by the owners and/or operators of MS4s pursuant to 40 CFR sections 122.26(d)(2)(iii)(D), 122.41(h) and 122.42(c), among other authorities BMP implementation must be tracked to ensure that implementation is carried out as required in the Tentative Order. However, for clarification, Part X of Attachment E – MRP only requires <u>tracking</u> of new development and redevelopment subject to the provisions in Part VI.D.6 of the Tentative Order, not actual water quality monitoring of BMP effluent to determine BMP effectiveness.</p>	<p>None</p>

	<p>the receiving water.</p> <p>Beyond this, monitoring for BMP effectiveness poses a serious challenge to what determines “effectiveness” -- effective relative to what standard? It is also not clear how such monitoring is to be performed.</p>			
<p>Part II.E.5.</p>	<p>Omit the requirement II.E.5. The MS4 Permit is to regulate discharges to receiving water. It is the role of the State EPA and Water Quality Control Board, not municipal governments, to conduct Regional Studies for Southern California Monitoring Coalition, bio-assessment and Pyrethroid pesticides. This imposing of State responsibilities beyond Federal requirements on local municipal governments is an unfunded mandate. Please provide legal justification for this transfer of jurisdiction.</p> <p>Requiring 85 jurisdictions to conduct regional monitoring is duplicative and inefficient and should be conducted by a Regional authority.</p> <p>Regional studies also lie outside the scope of the MS4 permit. However, because federal regulations require ambient monitoring in the receiving water, a task performed by the Regional Board’s SWAMP, regional watershed monitoring for aforementioned target pollutants can be satisfied through ambient monitoring. This can be accomplished with little expense on the part of permittees by:</p>	<p>LA Permit Group (Comment 11)</p>	<p>Regarding the Southern California Stormwater Monitoring Coalition Watershed Monitoring Program requirements, the objective of the Federal Clean Water Act is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters (CWA section 101(a)). The requirement for Permittees to assess biological impacts of MS4 discharges on receiving waters is consistent with this objective. Biological assessment of receiving waters is necessary to evaluate cumulative effects of multiple pollutants discharged from the MS4.</p> <p>The Pyrethroid Insecticide Study Requirements in Attachment E- MRP have been deleted. Where toxicity is observed in the receiving water, Permittees are required to conduct a toxicity identification evaluation (TIE). Where the TIE identifies pyrethroids as the cause of toxicity, Permittees will be required to test for pyrethroids in outfalls immediately upstream of the receiving water monitoring station. This is appropriate, since studies show that urban use of pyrethroids is currently one of the greatest contributors of toxicity to urban waters.</p> <p>These provisions are required and/or authorized by federal law. (CWA section 308(a); 40 CFR sections 122.26(d)(2)(i)(F) and (d)(2)(iii)(D), 122.41(h), (j)-(l), 122.42(c), 122.44(i), and 122.48.) The Board has determined that this provision is necessary to determine compliance with the conditions of this permit and to determine the impacts of the permittees’ discharges on receiving waters. Therefore, this requirement is not an unfunded state mandate.</p>	<p>Revisions to Attachment E-MRP to eliminate the requirement to conduct a Pyrethroid Insecticide Study, and to modify requirements related to aquatic toxicity monitoring.</p>

	(1) using ambient data generated by the Regional Board SWAMP; (2) re-setting the County's mass emissions stations to collect samples 2 to 3 days following a storm event (instead of using a flow-based sampling trigger); and (3) using any data generated from existing coordinated monitoring programs (e.g., Los Angeles River metals TMDL CMP), provided that the data is truly ambient.			
Parts III.F and III.G.	Omit the requirements III.F. and III.G. Specifying Sampling Methods and Analytical Procedures in the permit adds unnecessary liability for Cities for work that is already described in USEPA Protocols and per approved TMDLs. These Items should be combined and state to follow USEPA Protocols or per approved TMDLs.	LA Permit Group (Comment 12)	Specification of sampling methods and analytical procedures is common practice in NPDES permits as it provides clarity of expectations when Monitoring Plans are submitted by Permittees. For the most part, these sections cross-reference requirements included elsewhere in the Tentative Order, specifically in Attachment D, Part III, or specify that methods must be fully described in each Permittee's monitoring program, which will be submitted for review and approval by the Regional Water Board Executive Officer. Sections 122.41(j)(1) and (j)(4) of Title 40 of the Code of Federal Regulations require that samples and measurements taken for the purposes of monitoring shall be representative of the monitored activity, and monitoring must be conducted according to testing procedures approved under 40 CFR Part 136 unless another method is required under 40 CFR subchapters N or O. The Board has determined that the sampling methods and analytical procedures included in Parts III.F. and III.G. will provide reliable representations of the monitoring activity.	None
Part III.F.2	The current requirement limiting grab samples for bacteria, oil and grease, cyanides, and volatile organics unnecessarily limits the ability for MS4s to collect grab samples for other constituents that are intended to be collected as grab (i.e., chromium) and instances where grab samples are considered to appropriately	City of Los Angeles (Comment 83)	The Board generally agrees with providing greater flexibility for Permittees to determine whether grab samples or composite samples are most appropriate given the constituent and discharge conditions. Justification for grab samples must be included in a Permittee's IMP or CIMP per Part III.F.1 of Attachment E-MRP. The MRP has been revised to allow greater flexibility for Permittees to collect grab samples for both constituents that are required to be taken as such, and where grab samples are	Language revised.

	<p>characterize conditions (i.e., dry weather). Suggest removing the sentence or alternatively revise as follows:</p> <p>2. Grab samples shall be taken only for <u>constituents that are required to be collected as such (i.e., pathogen indicator bacteria, oil and grease, cyanides, and volatile organics) and in instances where grab samples are generally expected to be sufficient to characterize conditions (i.e., dry weather).</u></p>		generally expected to be sufficient to characterize conditions.	
Part III.H.	Part III.H is the first of a number of requirements related to reporting. The requirements in the MRP appear duplicative at times and led to some confusion. Please either remove Part III.H as the reporting requirements are laid out in detail in Parts XIV through XVIII or revise Part III.H.1 to simply refer to Parts XIV through XVIII.	City of Los Angeles (Comment 84)	Part III.H is revised to remove provisions duplicative with those in Parts XIV through XVIII.	Attachment E-MRP revised.
Part III.H.3.	There is a typo for Item 3. Item 3. should read "...requirements identified in Part XVIII.A.5. and Part XVIII.A.7 of this MRP."	LA Permit Group (Comment 13); County of Los Angeles (Comment 140)	The language has been corrected to read: "...requirements identified in Part XVIII.A.5. and Part XVIII.A.7 of this MRP."	References corrected in the MRP.
Monitoring	When a discharge occurs through an MS4, permits are already attained and NPDES results must be submitted to the authorized MS4 and to the LARWQCB. Furthermore the reporting requirements as drafted are ambiguous. The new reporting requirements add organic matter, and total suspended solids (TSS). These	California Water Service Company	The Order has been revised to clarify that pollutants of concern may include organic matter and TSS among others. If these are not pollutants of concern for the particular potable water release, they do not need to be monitored. USEPA approved methods should be used for all pollutants of concern that are monitored in the discharge. Regarding the additional level of reporting, this reporting is necessary as Permittees are responsible for controlling discharges of pollutants from their MS4s and	Language revised.

	are requirements that are vague and are drafted too broad. The additional levels of reporting to an MS4 outlined in III A 4 a, in itself is also burdensome.		need to be able to track potential sources of pollutants in non-storm water discharges.	
Section III A 4 a II	This Section requires the CWS to attain local permits by the MS4 owner. However, if an MS4 holder is also a CWS, how can these discharges be processed in an independent fashion that allows an MS4 to have the same permitting and reporting as a CWS without an MS4.	California Water Service Company	The purpose of ensuring that a non-permittee discharger obtains necessary permits from the MS4 Permittee is to ensure that the MS4 Permittee has adequate control over discharges to and from its MS4. Where a MS4 Permittee is also the discharger of the potable water, it should have the wherewithal to control its own discharges to and from its MS4.	None
General	Finally, we are alarmed by the extensive new monitoring provisions that go far beyond what we had expected to be the focus of this next permit--integrated TMDL monitoring. The Peninsula Cities have been focused on coordinated monitoring for the Machado Lake Nutrient and Santa Monica Bay Bacteria TMDLs. We fully anticipated that the monitoring requirements in the next permit would allow us to continue that focus by amending our monitoring programs to incorporate the new TMDLs which have been promulgated for these water bodies and for Los Angeles Harbor, as we believed that TMDLs were the high priority focus of the Regional Board. Instead the 72-page monitoring section of the draft permit introduces a myriad of new monitoring requirements completely outside the monitoring requirements in the adopted TMDLs	Peninsula Cities	Improved monitoring and reporting requirements have been added to this permit in order to better assess compliance with permit conditions and the effects on receiving waters. Monitoring requirements have been reduced in the revised tentative order (e.g., significant reductions in the toxicity monitoring program, elimination of the pyrethroid special study) and opportunities for efficiencies through coordinated monitoring and customization of monitoring requirements in conjunction with a Watershed Management Program have been provided.	None
<i>Integrated Monitoring Programs</i>				
Part IV.A.4.	The IMPs should allow for	City of Los	The Board generally agrees with the suggestion to allow	Attachment E-

	<p>modification of monitoring requirements to focus efforts on watershed priorities. The WMP will identify specific priorities based on TMDLs and 303(d) Listings, which will allow MS4s to tailor monitoring to address the Primary Objectives and provide data to support management decisions. As currently written, the IMP requirements appear to only allow flexibility to modify screening approaches for dry weather outfall monitoring. More efficient approaches may be justifiable for other components of the IMP and should be allowed. Please revise Part IV.A.4 as follows:</p> <p>Where appropriate (e.g., dry-weather outfall based screening program), the Integrated Monitoring Program may develop and utilize <u>alternative approaches to meet the Primary Objectives (Part II.A) and address the five Monitoring Program elements (Part II.E). Sufficient justification shall be provided in the IMP for the alternative approach(es). The alternative approach(es) must be screening level monitoring strategies to avoid more costly analytical procedures if approved by the Regional Water Board Executive Officer.</u></p>	<p>Angeles (Comment 85)</p>	<p>alternative approaches to monitoring in conjunction with a Watershed Management Program, subject to Executive Officer approval.</p>	<p>MRP revised.</p>
<p>Part IV.A.6.</p>	<p>Just for clarification, this provision for the IMP to address all TMDL and Non-TMDL monitoring does not prevent a reduction in the frequency, number of locations, or parameters. We anticipate that integrating all monitoring</p>	<p>City of Los Angeles (Comment 87)</p>	<p>The Board agrees that TMDL monitoring and monitoring to characterize storm water and non-storm water discharges from the MS4 and impacts on receiving water during wet and dry weather may be consolidated in an IMP or CIMP to meet the objectives of all of those programs subject to Executive Officer approval.</p>	<p>None</p>

	programs will result in a more efficient monitoring effort where the number of sampling events and analyses may be significantly reduced.			
Part IV.B.	<p>The CIMPs should allow for modification of monitoring requirements to focus efforts on watershed priorities. The WMP will identify specific priorities based on TMDLs and 303(d) Listings, which will allow MS4s to tailor monitoring to address the Primary Objectives and provide data to support management decisions. As currently written, the CIMP requirements do not appear to allow flexibility to modify monitoring approaches. More efficient approaches may be justifiable for other components of the CIMP and should be allowed. Please add a new bullet to Part IV.B. as follows:</p> <p>Where appropriate, the Coordinated Integrated Monitoring Program may develop and utilize alternative approaches to meet the Primary Objectives (Part II.A) and address the five Monitoring Program elements (Part II.E). Sufficient justification shall be provided in the CIMP for the alternative approach(es). The alternative approach(es) must be approved by the Regional Water Board Executive Officer.</p>	City of Los Angeles (Comment 86)	The Board agrees and has included clarifying language.	Attachment E-MRP revised.
Part IV.C.1.	More time is needed to prepare Coordinated Integrated Monitoring Plans due to the number of agencies	LA Permit Group (Comment 14)	Given that many of the stakeholders have organized to coordinate their comments to the draft MS4, that the permit has been in place for more than 10 years, that there	Attachment E-MRP revised

	<p>involved. Since existing monitoring programs will proceed as Coordinated Integrated Monitoring Plans are being prepared, then there is no need for accelerated schedules. Revise Item 1. to provide twelve (12) months for each Watershed Group to submit a Memorandum of Understanding to work with other agencies for a Coordinated Integrated Monitoring Plan. A letter of intent allows a Permittee to drop out of the process at any time and 12 months are required to process a Memorandum of Understanding with County and State agencies.</p>		<p>has been notice and active stakeholder participation in the development of this permit for more than 1 year, it is reasonable to require notification regarding Permittees' intent to develop an IMP or CIMP within 6 months. The Tentative Order has been revised to align submittal of an IMP or CIMP with submittal of either individual or collaborative WMPs, respectively.</p>	
<p>Part IV.C.2.</p>	<p>Revise Item 2. to require "Each Permittee not participating in a Coordinated Integrated Monitoring Plan to submit an Integrated Monitoring Plan..."</p>	<p>LA Permit Group (Comment 15)</p>	<p>The Regional Board, in an effort to coordinate submittal deadlines, has revised Part IV.C.2 as follows: "Each Permittee <u>not electing to develop a WMP plan</u> shall submit an IMP...to the Executive Officer of the Regional Water Board within <u>twelve nine (129)</u> months after the effective date of this Order."</p>	<p>Change made as indicated.</p>
<p>Part IV.C.3.</p>	<p>Additional Time is needed to complete a CIMP. Twelve months is not sufficient time to complete a CIMP. Individual watersheds can have upwards of 40 agencies that may participate in a CIMP. Additionally, Regional Studies that may be addressed by CIMPs could include all 80 plus LA County Copermittees. For reference, TMDL requirements for monitoring program submittal, which tend to address one type of constituent, typically exceed 12 months. For more complicated monitoring (such as the LA/Long Beach Harbors) TMDL have 20 months. The primary challenge for</p>	<p>City of Los Angeles (Comment 88); LA Permit Group (Comment 16)</p>	<p>In an effort to coordinate submittal deadlines, Part IV.C.3 is revised as follows: "The participating Permittees electing to develop a WMP plan shall submit an <u>IMP or CIMP plan and a letter of intent, signed by each of the participating Permittees</u>, to the Executive Officer of the Regional Water Board <u>concurrently with their draft WMP plan within 12 months after the effective date of this Order.</u>"</p> <p>This change will provide Permittees who submit a Coordinated WMP and perform early actions an additional 6 months to submit the CIMP.</p>	<p>Change made as indicated.</p>

	submitting coordinated monitoring programs is twofold: 1) working with a large group to come to consensus on a technical approach and 2) developing and signing agreements (cost sharing and memoranda of agreement). To truly allow for a coordinated approach that allows Permittees to develop a robust technical approach and work through the approval process (often through City council approval) at least 18 months are needed. Please revise the requirement for CIMPs to be submitted from 12 months to 18 months.			
Timeline	<p>The requirement to begin monitoring 30 days after the Board’s approval of the IMP and CIMP does not provide sufficient time. The Board has typically allowed 6 months or more to implement approved TMDL Coordinated Monitoring Plans.</p> <p>Recommend revise IV.C.5 to read: <u>Monitoring Implementation of the IMP or CIMP</u> shall commence within <u>30 days 6 months</u> after approval of the IMP or CIMP plan by the Executive Officer of the Regional Water Board.</p>	County of Los Angeles (Comment 141)	Given that many of the stakeholders have organized to coordinate their comments to the draft MS4, that the permit has been in place for more than 10 years, that there has been notice and active stakeholder participation in the development of this permit for more than 1 year, it is reasonable to require co-Permittees to begin monitoring in an expeditious manner. However, the Tentative Order has been revised to extend the time frame for commencing monitoring from 30 days to 90 days after approval of the CIMP. Permittees electing to develop an IMP will still be required to commence monitoring within 30 days, since close coordination with other Permittees is not required.	Language revised
Part IV.C.5.	Revise to allow 9 months after approval of an IMP or CIMP by the Executive Officer to commence monitoring. It takes 3 months to issue Request for Proposals and award a contract for monitoring. It takes an additional 6 months to obtain permits from the Los Angeles County Flood Control District to access monitoring	LA Permit Group (Comment 17)	Given that many of the Permittees have organized to coordinate their comments to the draft MS4, that the permit has been in place for more than 10 years, that there has been notice and active Permittee participation in the development of this permit for more than 1 year, it is reasonable to require co-Permittees to begin monitoring in an expeditious manner. However, the Tentative Order has been revised to extend the time frame for commencing monitoring from 30 days to 90 days after approval of the	Language revised

	locations on their systems.		CIMP. Permittees electing to develop an IMP will still be required to commence monitoring within 30 days, since close coordination with other Permittees is not required. Permittees should anticipate the need for access permits and coordinate with LACFCD where necessary early in the monitoring program development process.	
Timeline	The MRP states that “[m]onitoring shall commence within 30 days after approval of the IMP or CIMP plan by the Executive Officer...” How long does the Board anticipate the approval process taking? The Environmental Groups are concerned that the limited staff resources may significantly delay this approval process and inhibit adequate monitoring from taking place for an extended period of time. The MRP must require that current MS4-required monitoring and TMDL monitoring occurs during the interim.	Environmental Groups	The Tentative Order has been revised to clarify that any monitoring conducted under Order No. 01-182 or an approved TMDL monitoring plan must continue until approval of the Permittee’s IMP or CIMP.	Language revised
Part IV.C.7.	Both the current permit shoreline monitoring program (CI-6948) and the SMBBB TMDL Coordinated Shoreline Monitoring Plan (CSMP) are being incorporated into the new permit. The CI-6948 shoreline monitoring requirements, Section II.D, is redundant to the CSMP. All stations monitored in the CI-6948 are also monitored in the CSMP. Furthermore, the SMBBB TMDL specifies that the agencies are to select sampling frequency and the CSMP states that the agencies have selected weekly sampling frequency. However, CI-6948 requires several stations to be monitored up to 5 days per week and with the addition of the CSMP	LA Permit Group (Comment 18)	The current monitoring requirements in Order No. 01-182 remain in place until the IMP or CIMP submitted as required by the Tentative Order are approved by the Executive Officer. Permittees may propose the changes identified in their IMP or CIMP.	None

	<p>additional stations will be monitored two days per week.</p> <p>Paragraph II.D.b) of the CI-6948 shoreline monitoring section specifies that the sampling frequency at 28th Street (DHS 113), also SMB-5-2, and Herondo storm drain (DHS 115), also SMB-6-1, be increased to 5 times per week. Paragraph II.D.e) states that monitoring sites are to be monitored 5 days per week if the historical water quality is worse than the reference beach. However, no evidence was presented to the responsible agencies that this was the case for the SMB-5-2 or 6-1.</p> <p>An evaluation of historical data was presented by the Regional Board Staff Report for the reconsideration of the SMBBB TMDL dated May 2012. Further evaluation of this data shows that SMB-5-2 and SMB-6-1 should not be subject to the increase frequency.</p> <p>In addition, the inclusion of both the CI-6948 shoreline monitoring program and CSMP into the permit will result in 5 (SMB-5-1, 5-3, 5-5, 6-5, and 6-6) of the other 9 monitoring stations in SMBBB TMDL Jurisdictional Groups 5 and 6 being monitored 2 days per week which is not the case for any of the other CSMP stations.</p> <p>For all of the above reasons, the shoreline monitoring provisions of CI-6948 should be removed from the new</p>			
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	permit monitoring program. However, at a minimum, paragraph D.1.b) should be removed and paragraph D.1.e).(1) should be modified to remove stations S13 (SMB-5-1), S14 (SMB-5-3) S15 (SMB-5-5), S17 (SMB-6-5) and S18 (SMB-6-6).			
Implementation	Insufficient time is allotted to prepare Coordinated Integrated Monitoring Plans (CIMP). Since the monitoring for TMDLs should continue per the TMDL schedules, the Permittees should be allowed sufficient time to prepare the CIMPs. To prepare a CIMP the Permittees will need more than a Letter of Intent to proceed. We recommend that the draft order be modified to allow 12 months to submit a Memorandum of Agreement to participate in a CIMP and 24 months to submit the complete CIMP. The time required to award the monitoring contract is 3 months and at least 6 months are needed to obtain Los Angeles County Flood Control Encroachment Permits, thus at least 9 months is needed before commencing monitoring.	Cities of La Verne, Inglewood, and West Hollywood	The CIMP development time has been revised to align with submittal of a Watershed Management Program.	Language revised.
<i>TMDL Monitoring Plans</i>				
Past Due and USEPA TMDLs	The MRP should include shortened timeframes for submitting MRPs on past-due TMDLs and USEPA TMDLs adopted prior to 2010. Also, the Board should require all monitoring data that have been collected with respect to the TMDL since the effective date be submitted at the same time.	Environmental Groups	Monitoring data is routinely submitted for TMDLs for which final compliance deadlines have passed, namely, bacteria TMDLs for Santa Monica Bay Beaches, Marina del Rey Harbor, and Malibu Creek. Monitoring and data submittal requirements for these TMDLs will continue uninterrupted as Permittees developed their IMPs or CIMPs.	Clarification that TMDL monitoring shall continue during development of IMPs/CIMPs
TMDL	A summary of TMDL monitoring	Environmental	It would be unwieldy to include the details of all of the	None

Monitoring Plans	locations, frequencies and parameters should be included in the MRP or Fact Sheet. Merely referencing the Monitoring Plans makes review of the overall scope of the MRP in conjunction with the TMDL monitoring plans extremely difficult, as the monitoring provisions are not described in the permit itself.	Groups	TMDL monitoring plans in the MRP. Further, the MRP allows Permittees to modify the requirements of an approved TMDL Coordinated Monitoring Program to better integrate all monitoring requirements on a watershed basis, subject to public review and approval by the Executive Officer. The MRP requires that Permittees document how TMDL monitoring requirements are being met in their IMPs or CIMPs.	
Receiving Water Monitoring				
Part VI.C.1.b	Monitoring should be performed per approved IMP or CIMP or approved TMDL. The IMP and CIMP should identify rain gauges to use in the appropriate watershed.	LA Permit Group (Comment 19)	The Regional Board agrees.	Language has been changed to allow greater flexibility in selection of rain gauges.
Part VI.C.1.b.ii	Permittees should be allowed to utilize an alternative to the prescribed rainfall triggers for conducting wet weather monitoring. Permittees have been monitoring the LA region watersheds for years and have a good understanding of how each watershed responds to rainfall events under varying circumstances. As such, the Permit should allow Permittees to propose an alternative in the C/IMPs to the prescribed rainfall triggers.	City of Los Angeles (Comment 91)	The Regional Board agrees.	Language has been included to allow alternative triggers.
Part VI.C.1.d.iv & Part VIII.B.1.c.iv	Omit the requirement to monitoring for TSS and SSC. The TMDLs will specify if TSS or SSC monitoring is required, otherwise sediments are needed for beach replenishment and the naturally occurring transport of sediments should not be regulated.	LA Permit Group (Comment 20 & 28)	The Regional Board disagrees. In a highly urbanized area such as Los Angeles County, it is difficult to determine "naturally occurring transport of sediment." Further, TSS or SSC can impair beneficial uses and need to be monitored.	None
Part VI.D.1.a.	Omit the requirement for "One of the monitoring events shall be during the	LA Permit Group	The MRP has been revised to indicate that the Permittee may propose a month for the monitoring event based upon	Language revised.

	month with the historically lowest instream flows.” This data does not exist and it would be simpler to specify the historically driest month.	(Comment 22)	either historically lowest instream flow or historically driest month, subject to Executive Officer approval.	
Part VI.D.1.b.	Revise item i. and ii. to simply be on days with no measurable rain. There are sufficient days of no measurable rain in Southern California and any rain event could result in isolated stormwater runoff.	LA Permit Group (Comment 23)	The MRP has been revised to indicate that the Permittee may propose a day or time period for the monitoring event representative of dry weather conditions, subject to Executive Officer approval.	Language revised.
Receiving Water Monitoring	The Permit's Receiving Water Monitoring Program exceeds monitoring requirements authorized under Water Code sections 13225(c), 13267, and 13383. To the extent the Permit requires individual permittees to compile information beyond their jurisdictional control, they are unauthorized. The information requested by the Board, including the requirement to monitor authorized or unknown discharges, is also unreasonable.	Cities of Agoura Hills, Artesia, Beverly Hills, Hidden Hills, La Mirada, Monrovia, Norwalk, Rancho Palos Verdes, San Marino, South El Monte, and Westlake Village	Like the other monitoring and reporting requirements, the receiving water monitoring program is included in the permit pursuant to the Board's authority under the Clean Water Act and its regulations (33 U.S.C. § 1318(a); 40 C.F.R. §§ 122.26(d)(2)(i)(F) & (d)(2)(iii)(D), 122.41(h), (j)-(l), 122.42(c), 122.44(i), and 122.48.), as well as California Water Code section 13383. The Clean Water Act specifically requires monitoring and reporting to determine whether any person is in violation of any effluent limitation, or other limitation, prohibition or effluent standard, pretreatment standard, or standard of performance. (33 U.S.C. § 1318(a)(2).) Permittees are also required to: “Carry out all inspection, surveillance and monitoring procedures necessary to determine compliance and noncompliance with permit conditions....” (40 C.F.R. § 122.26(d)(2)(i)(F).) Water Code sections 13225 and 13267 do not apply to the monitoring requirements in this permit. Instead, Water Code section 13383 governs the permitting process here. The general authority to require monitoring and reporting afforded by Water Code sections 13225 and 13267 does not trump the more specific authority the Board has in the context of issuing NPDES permits. Because the monitoring and reporting program requirements are required by federal law, any conflicting state law is preempted. (See <i>Silkwood v. Kerr-McGee Corp.</i> (1984) 464 U.S. 238, 248 [“state law is still preempted . . . where	Clarifying language added. References to California Water Code section 13267 deleted.

		<p>the state law stands as an obstacle of the full purposes and objectives of Congress.”]; see also Wat. Code, §§ 13370, 13377.)</p> <p>Neither the Clean Water Act and its regulations, or Water Code section 13383, require a cost/benefit analysis prior to imposing monitoring and reporting requirements.</p> <p>The receiving water monitoring program is necessary to determine compliance with terms of the permit. The purposes of receiving water monitoring are to measure the effects of a permittee’s storm water and non-storm water discharges from the MS4 to the receiving water, to identify water quality exceedances, to evaluate compliance with TMDL WLAs and receiving water limitations, and to evaluate whether water quality is improving, staying the same, or declining.</p> <p>The commenters insinuate that only permittees with receiving waters located within their jurisdiction should be responsible for receiving water monitoring. The Board disagrees. Permittees may be required to compile and submit information based on monitoring of receiving waters regardless of whether those receiving waters are located within the jurisdiction of the permittee. Regardless of whether receiving waters are located within the jurisdiction of a permittee, a permittee is responsible for discharges from their MS4 and any resulting impacts to receiving waters. Requiring only permittees with receiving waters within their jurisdiction to monitor such receiving waters would unfairly place the burden and costs of such monitoring on a select number of permittees, even though discharges originating from permittees outside the jurisdiction would be reaching receiving waters. Accordingly, the receiving water monitoring requirements are reasonable.</p> <p>The requirement to monitor authorized or unknown discharges is not unreasonable and is required by federal</p>	
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			<p>law. In accordance with section 402(p)(3)(B)(ii) of the Clean Water Act, the permit prohibits the discharge of unauthorized non-storm water to receiving waters. Federal regulations also require that permittees implement a program “to detect and remove (or require the discharger to the municipal separate storm sewer to obtain a separate NPDES permit for) illicit discharges and improper disposal into the storm sewer.” (40 C.F.R. § 122.26(d)(2)(iv)(B).) This program shall include: “A description of a program, including inspections, to implement and enforce an ordinance, orders or similar means to prevent illicit discharges to the municipal separate storm sewer system....” (40 C.F.R. § 122.26(d)(2)(iv)(B)(1).)</p> <p>References to Water Code section 13267 as authority to require monitoring and reporting were unnecessarily included in the tentative permit. In order to provide greater clarity concerning the Board’s authority to require monitoring and reporting, references to Water Code section 13267 have been deleted from the tentative permit, with the exception of references related to inspection and entry provisions.</p>	
<p>Receiving Water Monitoring</p>	<p>Toxicity monitoring for wet weather should be limited to once a year since aquatic toxicity has been well characterized through past monitoring activities under the current permit.</p> <p>Recommend revising VI.C.1.a. to read: “The receiving water shall be monitored a minimum of three times per year <u>during the wet weather season</u> for all parameters except aquatic toxicity, which must be monitored at least twice <u>once</u> per year, or more frequently if required by applicable TMDL CMPs.”</p>	<p>County of Los Angeles (Comment 143)</p>	<p>It is important to have more than a single data point per year during wet weather conditions for aquatic toxicity at instream monitoring stations, as aquatic toxicity is a valuable tool for evaluating the cumulative effect of multiple pollutants and identifying impacts due to constituents of emerging concern that are not routinely monitored.</p>	<p>None</p>

<p>Definition of “Wet Weather” for Receiving Water and Storm Water Outfall Based Monitoring</p>	<p>“Wet weather” is defined differently for discharges to marine water (0.1” of precipitation determined from at least 50% of LAC-controlled rain gauges in the watershed) and freshwater (20% greater than base flow or as defined by effective TMDLs within the watershed). The definition should be consistent in order to develop consistent monitoring programs with comparable results. The definition of “wet weather” should also be based on predicted precipitation, not base flow.</p> <p>Allow Permittees to agree upon and propose one method, consistent with TMDL requirements, to determine sampling trigger conditions for wet weather monitoring to ensure data are comparable across monitoring programs.</p>	<p>County of Los Angeles</p>	<p>The Tentative Order has been revised to allow Permittees to propose alternative thresholds/criteria for wet weather sampling through an IMP or CIMP. The Regional Board agrees that Permittees should come to consensus on one method, consistent with TMDL requirements, to determine the sampling trigger conditions for wet weather to ensure data comparability.</p>	<p>Attachment E-MRP revised</p>
<p>Coordinated receiving water and storm water outfall monitoring</p>	<p>The permit proposes to require taking receiving water samples within 6 hours of taking outfall samples. Coordinating trigger conditions between many outfall and receiving water sites will be time consuming and burdensome, requiring complex telemetry and data management systems to ensure that triggering times are coordinated. This section could also create conflicts if a Permittee decides to submit an IMP and other Permittees within the watershed submitted a CIMP. This requirements should be eliminated and allow affected agencies to coordinate trigger conditions between outfall and receiving water sites using an approach that is reasonable and practical. The</p>	<p>LACFCD (Comment 40); County of Los Angeles (Comment 145)</p>	<p>Establishing the relationship between outfall monitoring and receiving water quality is important. However, the Regional Board recognizes the logistical challenges of coordinating outfall and receiving water monitoring during a storm event. Attachment E-MRP of the Tentative Order has been revised to state that receiving water monitoring must begin as soon as possible after storm water outfall based monitoring in order to be reflective of potential impacts from MS4 discharges.</p>	<p>Language revised</p>

	IMP or CIMP would include recommendations on the start of receiving water monitoring in relation to the start of outfall-based monitoring.			
Dry Weather Receiving Water Monitoring – Minimum Requirements	It is unclear how many years of data are required to determine the “historically lowest” month referred to in VI.D.1.a.. The sampling point may be in a stream not equipped with stream gauges. If stream gauges records exist, it may be possible to have zero flows. This requirement should be deleted. Sampling during dry weather should be just that, “sampling during dry weather” as defined in the MRP. Alternatively, revise as follows: “One of the monitoring events shall be during the month with the historically lowest instream flows for the last 10 years, provided the instream data is available.”	County of Los Angeles	The Tentative Order has been revised to allow Permittees to use either flow data or precipitation data to determine the sampling month for the critical dry weather condition (i.e. lowest flows or least precipitation).	Language revised.
Definition of “Dry Weather” for Receiving Water Monitoring	“Dry weather” is defined differently for discharges to marine water (less than 0.1” of precipitation on days not less than three days after a rain event of 0.1 inch or greater, determined from at least 50% of LAC-controlled rain gauges in the watershed) and freshwater (less than 20 percent greater than the base flow or as defined by effective TMDLs within the watershed). The definition should be consistent in order to develop consistent monitoring programs with comparable results. The definition of “dry weather” should also be based on precipitation, not base flow. Recommendation	County of Los Angeles	The Tentative Order has been revised to allow Permittees to propose alternative thresholds/criteria for triggering dry weather sampling through an IMP or CIMP. The Regional Board agrees that Permittees should come to consensus on one method, consistent with TMDL requirements, to determine the sampling trigger conditions for dry weather to ensure data comparability.	Language revised

	Allow Permittees to agree upon and propose one method, consistent with TMDL requirements, to determine sampling trigger conditions for dry weather monitoring to ensure data are comparable across monitoring programs.			
Receiving Water Monitoring – Aquatic Toxicity & Monitoring Methods	Aquatic toxicity has been well characterized through past monitoring activities, and should not require more than one sampling each for wet and dry weather. Toxicity testing should not be applied to wet weather samples. Should toxicity testing during wet weather still be required, it should be limited to acute toxicity testing. Aquatic toxicity monitoring in the receiving water should be conducted twice per year, once each during wet and dry weather.	County of Los Angeles	The required frequency for receiving water monitoring of aquatic toxicity during dry weather has been reduced to once per year during the month with the historically lowest flows (or historically driest month, where flow data are not available), unless more frequent monitoring is required pursuant to TMDL provisions.	Language revised
Receiving Water Monitoring	The MRP should specify each water quality monitoring frequency. The Board should require minimum sampling of five times per week at the same beaches included in the 2001 permit that were identified to necessitate this more frequent sampling.	Environmental Groups	The number of outfall and receiving water monitoring events is specified in Part VI.C-D, Part VIII.B, and Part IX.G of Attachment E. Additionally, Attachment E-MRP requires that Permittees continue to conduct monitoring required by Order No. 01-182 until the Permittee’s IMP or CIMP has been approved by the Executive Officer.	Clarifying language added
Receiving Water Monitoring	The MRP should specify a minimum number and the exact locations of receiving water monitoring locations. The MRP should include a specific list and map of all receiving water monitoring locations, including the existing mass emissions stations and TMDL receiving water compliance points. The current mass emissions station monitoring locations should be	Environmental Groups	The permitting structure has moved from a system wide basis to a watershed approach. Representative receiving water monitoring locations will be determined during the development of IMPs and/or CIMPs. The Board is requiring the continuation of the current mass emissions and shoreline monitoring stations until approved IMPs and CIMPs are in place.	None

	maintained as is, to continue to assess trends over time. The option to justify the elimination of mass emissions station monitoring in Parts VI.A.1.b.v. and VI.B.3.b. should be eliminated.			
Receiving Water Monitoring	<p>The MRP should include additional receiving water monitoring parameters. The Receiving Water Monitoring requirements contain an insufficient number of monitoring parameters and inappropriately focus on only known impairments, rather than a comprehensive assessment of the waterbody.</p> <p>The Board should maintain the parameters that are currently monitored in the receiving water. This is particularly important for assessing trends over time. This same list of parameters should be mimicked in the outfall monitoring program.</p>	Environmental Groups	<p>The Board will require additional parameters during the first year of monitoring per approved IMPs and/or CIMPs. Specifically, receiving water monitoring stations shall be screened for all constituents identified in Table E-2 of the revised Attachment E-MRP, during the first sampled wet weather event and during the critical dry weather event. If a constituent is not detected at the Method Detection Limit (MDL) for its respective test method it need not be further analyzed unless the observed occurrence shows concentrations greater than water quality objectives. If a constituent is detected exceeding the lowest applicable water quality objective then the constituent shall be analyzed for the remainder of the Order at the receiving water monitoring station where it was detected. Additionally, if parameters are detected exceeding the lowest applicable water quality objective then the corresponding outfall monitoring (i.e. storm water or non-storm water) at outfalls upstream of the receiving water monitoring station shall include that parameter also.</p>	Language revised.
Receiving Water Monitoring	<p>The wet weather thresholds should be clarified. The thresholds assume that distance (space) and time are uniform throughout the waterbody. In reality, rainfall may be much more significant in the lower portion of a watershed, for example, than the upper portion. If a disproportionate amount of rain gauges are in the upper portion of the watershed, it could lead to a mischaracterization of conditions. The Board should clarify how these differences will be accounted for when determining wet versus dry weather.</p>	Environmental Groups	<p>The CIMPs and IMPs will determine the appropriate thresholds and are subject to review and approval by the Executive Officer.</p>	Clarifying language added

<p>Receiving Water Monitoring</p>	<p>The Regional Board has no legal authority to compel compliance with receiving water limitations through in-stream monitoring.</p>	<p>Cities of Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, San Gabriel and West Covina</p>	<p>Monitoring by the owners and/or operators of MS4s is required pursuant to Clean Water Act section 308(a) and 40 CFR sections 122.41(h), (j)-(l), 122.44(i), 122.48, 122.26(d)(2)(i)(F), 122.26(d)(2)(iii)(D) and 122.42(c). Section 122.26(d)(2)(iii)(D) identifies monitoring at outfalls, field screening points, and in-stream stations and requires representative data collection. Receiving water monitoring (i.e. in-stream monitoring) is necessary to assist in the evaluation of the effects of MS4 discharges on in-stream water quality, including assessing trends in the effect of MS4 discharges on in-stream water quality over time as Permittees implement additional and/or enhanced BMPs and improve implementation of their illicit discharge detection and elimination programs. In-stream monitoring, referred to in the Tentative Order as receiving water monitoring, is also well established and supported by EPA’s Part 2 MS4 permit application guide (EPA 833-B-92-002) and has been a part of the Los Angeles County MS4 program for more than ten years.</p> <p>Further, Permittees may demonstrate compliance with the receiving water limitations provisions through either outfall monitoring or receiving water monitoring. If a Permittee’s discharge quality as measured at the outfall does not exceed applicable WQBELs or receiving water limitations, then that provides a demonstration that the discharge did not cause or contribute to an exceedance of receiving water limitations.</p>	<p>None</p>
<p>Receiving Water Monitoring</p>	<p>Receiving water monitoring should be consistent with SWAMP protocols including the requirement that ambient monitoring be conducted two days following a storm event. Currently the receiving water monitoring is proposed to be conducted during storm events. Such an approach will not support the need to assess the receiving water quality consistent with the SWAMP approach that is used as the basis for</p>	<p>Cities of La Verne and Inglewood</p>	<p>Receiving water monitoring (i.e. in-stream monitoring) is necessary to assist in the evaluation of the effects of MS4 discharges on in-stream water quality, including assessing trends in the effect of MS4 discharges on in-stream water quality over time as Permittees implement additional and/or enhanced BMPs and improve implementation of their illicit discharge detection and elimination programs. Ambient monitoring conducted under SWAMP does not support these types of evaluation and would not be representative of the impacts of storm water discharges on the receiving waters. In-stream monitoring, referred to in</p>	<p>None</p>

	303(d) listing		the Tentative Order as receiving water monitoring, is also well established and supported by EPA’s Part 2 MS4 permit application guide (EPA 833-B-92-002) and has been a part of the Los Angeles County MS4 program for more than ten years.	
<i>Outfall Based Monitoring</i>				
Part VII.A.	Revise the description to include database, “The IMP and/or CIMP plan(s) shall include a map and/or database of the MS4 to include the following information:” GIS maps all come with database(s) that include much of the required information. It will be very difficult to fit all the information listed in VII.A. on one map. Change “a map” to “maps.”	LA Permit Group (Comment 24); County of Los Angeles (Comment 149)	The following underlined text has been added: “The IMP and/or CIMP plan(s) shall include a map(s) <u>and database(s)</u> of the MS4 to include the following information:”	Change made as indicated.
Part VII.A.4	The City of Los Angeles has a comprehensive database of its stormwater collection system. However there is no dataset with Effective Impervious Area (EIA) overlay for our region. Also we don’t have data on their consistency of having non-stormwater discharges. Furthermore occasionally we observe errors or missing and outdated data. Please understand that these discrepancies would not constitute a violation.	City of Los Angeles (Comment 92)	The EIA overlay is only required, if available. The Board anticipates that data on outfalls with significant non-storm water discharges will be added over the course of the permit term as a result of Permittees’ outfall screening programs pursuant to Part IX.B.	None
MS4 MAP	The Fact Sheet states that the mapping requirements included land use, impervious area, and effective impervious area (if available). LACFCD requests removing “impervious area” from the mapping requirements.	LACFCD (Comment 65)	Effective impervious area is valuable to aid in determining the amount of runoff generated from the subwatershed drainage areas. However, as noted by the commenter, the EIA overlay is only required, if available.	None
Part VII.A.11	Requiring MS4s to photograph every	City of Los	Permittees may prioritize outfalls for photo-	Language

	outfall is extremely burdensome for large cities. This one component of the MRP would require significant resources of those MS4s that are adjacent to waterbodies, or in the case of the City waterbodies in multiple watersheds. Request that the photographs be included in the database “if available.”	Angeles (Comment 93)	documentation concurrently with their outfall screening program. The Board anticipates that photographs of outfalls would be added to the database over the course of the permit term. Permittees may propose specific milestones in the IMP or CIMP for Executive Officer approval. Where accessibility and safety are a concern, Permittees are not required to photograph the outfall. The permit has been revised to add “where possible” to this requirement.	revised
MS4 Map	“MS4 Map” appears to be a misnomer. MS4 also includes municipal streets, curb and gutters, ditches, etc. If only open channels and underground storm drains are required to be mapped, “MS4” map should be revised. LACFCD recommends revising to “Storm Drain and Channels Map.”	LACFCD (Comment 41)	The Board agrees and the labeling will be revised to “Storm Drains, Channels and Outfalls Map(s) and / or Database”.	Language revised per commenter suggestion
Open Channels and Underground Pipes	Many of the pipes connecting to LACFCD catch basins are 18 inches and greater, but would not need to be included on the map to get an accurate layout of the storm drain system. Recommendation Revise VII.A.6. to read: The location and length of all open channel and underground pipes 18 inches in diameter or greater (except for catch basin connector pipes).	County of Los Angeles	The Board agrees and has revised the language per commenter’s recommendation.	Language revised.
MS4 Map Elements – Major Outfall Catchment Areas	Determination of accurate catchment areas will require extensive review of project files, topography maps, and field surveys to confirm catchment boundaries. It will require more than six (6) months to a year to complete this task.	County of Los Angeles	The timeframe for submittal of a draft IMP or CIMP has been aligned with the submittal of draft WMPs, allowing Permittees additional time to complete this task.	Language revised.
Storm Water Outfall Based Monitoring				
Part VIII.A.1.	Sampling in manholes results in entering confined space, often in roads	City of Los Angeles	Permittees may propose sampling locations in the IMP and CIMP subject to Executive Officer approval.	None

	<p>such as major arterials, which can be very expensive because of additional safety requirements for the crew and the need to coordinate with police regarding traffic impacts. Please add “where feasible given technical and safety constraints” following the word manhole.</p>	<p>(Comment 95); City of West Hollywood</p>	<p>Additionally, the Order notes in E.VIII: “The Permittee shall select outfalls with configurations that facilitate accurate flow measurement <u>and in consideration of safety of monitoring personnel.</u>”</p>	
<p>Part VIII.A.2.a.</p>	<p>The current permit language requires each Permittee to select one site per jurisdiction per HUC-12 watershed. In the LA River watershed alone 108 sites would be required to meet this requirement. This requirement would result in a significant cost to Permittees without a commiserate benefit. The approach results in sites that have comingled discharges from multiple land uses making the data difficult if not impossible for Permittees to use in evaluating where to focus minimum control measures and source control BMPs as well as where to site and build structural controls to treat stormwater. Furthermore, the proposed approach would still require Permittees to extrapolate the data to calculate their total loads to receiving waters and evaluate the potential impact. However, this approach would be fraught with inaccuracies as one would have to try and desegregate land uses to apply the loadings to other outfalls within the Permittee’s jurisdiction. Flexibility should be provided such that an alternative approach could be submitted with the IMP or CIMP. Such an alternative could include the</p>	<p>City of Los Angeles (Comment 94): County of Los Angeles (Comment 153)</p>	<p>The Tentative Order has been revised to allow alternative approaches in the IMP or CIMP subject to Executive Officer approval.</p>	<p>Language revised</p>

	monitoring of representative land use sites. A representative land use approach would provide Permittees the core data needed to evaluate their overall loading to receiving waters as well as utilize a modeling approach to identify problematic areas and develop and implement control strategies through the WMP.			
Storm Water Outfall Based Monitoring	The Board should require monitoring from more than one outfall in each watershed (HUC-12) drainage area. An associated receiving water monitoring location should be in proximity to this location. Further, the Board must ensure that appropriate land-use categories are monitored in order to be able to more readily determine if a MS4 is causing or contributing to a water quality objective exceedance, and if so, which Permittee. Drainages carrying stormwater from commercial, industrial, and high-use transportation should be prioritized.	Environmental Groups	Permittees must select representative monitoring locations in IMPs and CIMPs, subject to public review and Executive Officer approval. The Board will require compliance with the 4 th objective of the MRP which is to identify sources of pollutants in MS4 discharges. This objective requires a characterization of land uses in a watershed to determine pollutant sources.	None
Part VIII.A.2.e	Include the option to monitor “upstream of the actual outfall or downstream of a political boundary”. Sometimes the best location to do monitoring is at the next manhole downstream from a city boundary.	LA Permit Group (Comment 25)	This option is already addressed in Part VIII.A.2.c.	None
Part VIII.B.1.b	Omit the requirements ii. and iii. Monitoring should be performed per approved IMP or CIMP or approved TMDL.	LA Permit Group (Comment 27)	Attachment E-MRP has been revised to allow Permittees to propose alternative thresholds/criteria for triggering wet weather monitoring.	Language revised
Part VIII.B.1.c	Flow is a parameter that can easily and relatively accurately be estimated based on the drainage area, and the precipitation data for each outfall.	City of Los Angeles (Comment 97)	The Regional Water Board agrees that flow rates and volumes can be either measured specifically or can be estimated. Section III.F.5 of Attachment E only allowed flow estimation to be used at receiving water monitoring	Language revised

	Requiring flow measuring equipment for outfall measurement will further increase the cost to about \$30,000 per location. Consider deleting the flow measuring requirement.		stations where flow measurements are not in place. The MRP has been revised to also allow for the use of flow estimation of storm water discharges in instances where it is not practical or economically feasible, upon approval by the Executive Officer in an IMP or CIMP.	
Storm Water Outfall Based Monitoring	The MRP should determine the quality of a Permittee’s discharge relative to Water Quality Standards and effluent limits, not municipal action levels (MALs). Also, the calculated MAL values are weak and completely inappropriate. Using the 25th percentile in developing the MAL values means that 75 percent of the time, BMPs performed better. The Board has not provided any justification for using the 25th percentile standard. Also, median performance values should be used for developing Treatment BMP Performance Standards as was done in the Ventura MS4.	Environmental Groups	Data reported per the MRP will be used to determine the quality of a Permittee’s discharge relative to receiving water limitations and WQBELs. MALs are incorporated in the Order as benchmarks to trigger improvement(s) in storm water program implementation; MALs were set at the upper 25 th percentile to represent an “upset” value indicating a clear need for additional storm water controls to reduce the pollutant concentrations in the storm water discharges. This is one of several tools that can be used by Permittees to prioritize implementation actions. With regard to the Treatment BMP Performance Standards, the median value of BMP effluent performance is used for the treatment BMP benchmarks included in the Order. Unlike the Ventura County MS4 Order, the treatment BMP values in the Order are based on the median value of the top six performing BMPs per pollutant instead of allowing any BMP to be used as long as it meets the median effluent value for the BMP in the ASCE database. The method used in the Order further helps to ensure appropriate BMPs are used for the pollutants expected to be discharged from a project.	BMP performance benchmarks have been revised in Part VI.D.7.c., Table 11.
Monitoring Locations	As written, the Permit allows for monitoring of continuous flows at manholes and in channels as a discharge from an outfall. The County disagrees with the concept of treating flows within a channel or manhole as an “outfall” discharge. Such locations should be considered “alternative monitoring locations.” <u>Recommendation</u>	County of Los Angeles	Attachment E-MRP has been revised for clarification consistent with the commenter’s suggestion.	Language revised

	Revise as follows: “Storm water discharges from the MS4 shall be monitored at major outfalls, and/or alternative monitoring locations, such as manholes or in channels or storm drains at the Permittee’s jurisdictional boundary.”			
Definition of “Significant Non-Storm Water Discharges”	“Significant non-storm water discharges” should be defined.	County of Los Angeles	That term is best defined by Permittees as part of the IMP and CIMP development process.	None
Stormwater Outfall toxicity Monitoring	MS4 discharges are not the same as wastewater plant effluent which represents a single continuous discharge of typically consistent quality to receiving waters. Rather, urban runoff is episodic in nature. Furthermore, individual outfalls carry a minute percentage of the total flow in the receiving waters and as such toxicity observed in one outfall sample will likely have no affect on the receiving water. The current approach is appropriate for wastewater discharges but not urban runoff and they should be treated differently. The more appropriate approach for urban runoff is to identify whether toxicity exists in the receiving water, identify pollutants that are causing toxicity through toxicity identification evaluations (TIEs), and then incorporate monitoring of pollutants that are causing toxicity into the outfall monitoring. Please remove toxicity monitoring requirements from the stormwater outfall monitoring program.	City of Los Angeles (Comment 96)	Attachment E-MRP has been revised as suggested by the commenter.	Language revised

<p>Frequency</p>	<p>If repeated results from outfall monitoring do not exhibit aquatic toxicity, monitoring of aquatic toxicity should be discontinued.</p> <p><u>Recommendation</u> Revise as follows: “Storm water discharges shall be monitored a minimum of three times per year for all parameters except aquatic toxicity, which shall be monitored once per year (unless a proximate downstream receiving water monitoring location has not exhibited aquatic toxicity during the past two years, or the outfall monitoring location has not exhibited aquatic toxicity for three consecutive years).”</p>	<p>County of Los Angeles</p>	<p>The requirement to monitor for aquatic toxicity at outfalls has been removed from the MRP, except where required by a TMDL or where a TIE conducted in the receiving water is inconclusive. Where a TIE is inconclusive, the MRP includes requirements for aquatic toxicity monitoring at the upstream outfalls.</p>	<p>Language revised</p>
<p>Frequency</p>	<p>These are varying triggers to start monitoring for TMDLs or at the mass emission stations within each watershed. Therefore, data collected from each of these monitoring programs cannot be used for comparison purposes.</p> <p><u>Recommendation</u> Wet weather monitoring should be coordinated amongst outfalls, TMDLs, and mass emissions stations to ensure the results can be comparable.</p>	<p>County of Los Angeles</p>	<p>Permittees may propose alternative thresholds/criteria as triggers in an IMP or CIMP to ensure consistency and data comparability.</p>	<p>None</p>
<p>Sampling Methods</p>	<p>Revise VIII.C.2. as follows for clarification: “If a Permittee is not participating in an IMP or CIMP, the a flow-weighted composite sample of the for a storm water discharge shall be taken with using a continuous sampler, or it shall be taken as a combination of a minimum of 3 sample aliquots, taken</p>	<p>County of Los Angeles</p>	<p>Part VIII.C.2 is consistent with the commenter’s suggestion.</p>	<p>None</p>

	during in each hour of discharge within the first 24 hours of the discharge or for the entire discharge if the storm event is less than 24 hours. Each aliquot shall be being separated by a minimum of 15 minutes within each hour of discharge, unless the Regional Water Board Executive Officer approves an alternate protocol.”			
Stormwater Outfall Monitoring	The wet-weather WQBEL is based on a TMDL WLA in the receiving water that is non-ambient. As mentioned, federal regulations only require ambient monitoring in the receiving water, which by definition can never be deemed the same as wet weather monitoring. They are mutually exclusive. Regional Board staff has also incorrectly determined that a WQBEL may be the same as the TMDL WLA, thereby making it a “numeric effluent limitation.” Although numerous arguments may be marshaled against the conclusion, the most compelling of all is the State Water Resources Control Board’s clear opposition to numeric effluent limitations.	Cities of Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, San Gabriel and West Covina	Permits must include provisions consistent with the assumptions and requirements of TMDL wasteload allocations (WLAs). Further, CWA section 402(p)(3)(B)(iii) allows the Board, as the permitting agency to include in the MS4 permit “such other provisions as the [Board] determines appropriate for the control of such pollutants.” TMDL WLAs are assigned to point source discharges to receiving waters to achieve the numeric targets of the TMDL. Section 130.2(h) of Title 40 of the Code of Federal Regulations defines a WLA as the portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of water quality-based effluent limitation. The WQBELs included in the Order were derived from and are consistent with the assumptions and requirements of the TMDL WLAs. Monitoring is required to measure compliance with WQBELs and other permit provisions. The commenter also misunderstands the findings of the State Board’s panel on storm water. The panel’s conclusions focused on the variability in storm water BMP performance and concluded that numeric effluent limitations based on BMP performance were infeasible (i.e., technology based effluent limitations). However, the panel did not address the issue of deriving numeric water quality based effluent limitations from TMDL WLAs.	None
Stormwater Outfall	The determinant for a water quality standard exceedance is in the discharge	Cities of Baldwin Park,	Permittees may demonstrate compliance with the provisions of Part VI.E. and Attachments L-R in several	None

<p>Monitoring</p>	<p>from the outfall – not in the receiving water. The use of numeric WQBELs -- though incorrectly defined and established in this instance -- represents the compliance standard in discharges from the outfall. Adding a second compliance determinant in the receiving water is unnecessary and is not authorized under federal stormwater regulations because the receiving water lies outside the scope of the MS4.</p> <p>Recommended Corrective Action: Eliminate this requirement.</p>	<p>Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, San Gabriel and West Covina</p>	<p>ways, including at the outfall based on outfall monitoring and comparison to WQBELs or in the receiving water based on receiving water monitoring.</p> <p>Similarly, Permittees may conduct outfall monitoring and use those data to demonstrate that they did not cause or contribute to an exceedance of receiving water limitations.</p> <p>Monitoring by the owners and/or operators of MS4s is required pursuant to Clean Water Act section 308(a) and 40 CFR sections 122.41(h), (j)-(l), 122.44(i), 122.48, 122.26(d)(2)(i)(F), 122.26(d)(2)(iii)(D) and 122.42(c). Section 122.26(d)(2)(iii)(D) identifies monitoring at outfalls, field screening points, and in-stream stations and requires representative data collection. Receiving water monitoring (i.e. in-stream monitoring) is necessary to assist in the evaluation of the effects of MS4 discharges on in-stream water quality, including assessing trends in the effect of MS4 discharges on in-stream water quality over time as Permittees implement additional and/or enhanced BMPs and improve implementation of their illicit discharge detection and elimination programs.</p>	
<p>Outfall Monitoring</p>	<p>The requirements of the Outfall Based Monitoring are onerous. The Permit requires that “Storm water discharges from the MS4 shall be monitored at outfalls, manholes or in channels at the Permittee’s jurisdictional boundary.” There are no open channels or water bodies. The Permit does not provide a definition of “outfall.” However, the Outfall Based Monitoring section uses this term to describe a program of sampling storm water at the entry and exit from a jurisdictional boundary. “Outfall” is not simply being used as a term to describe a location where a pipe discharges to an open channel or water body.</p>	<p>Cities of El Segundo and West Hollywood</p>	<p>Monitoring at MS4 access points such as manholes is a valid option to monitor the MS4 discharge, and to assess storm water program effectiveness. The Regional Board will note the distinction between major outfalls and “alternative monitoring locations”.</p>	<p>Language revised.</p>

<p>Outfall Monitoring</p>	<p>Section VIII.A.2 Criteria for selecting outfalls The City requests that the Regional Board add an item ‘f’ providing that: “The selected outfall(s) for monitoring should be owned by the permittee where feasible.”</p>	<p>City of Malibu</p>	<p>Permittees may consider ownership when selecting outfalls for monitoring. It is not necessary to include this criterion in the MRP.</p>	<p>None</p>
<p>General</p>	<p>Section VIII.B.1.a ... storm water discharges shall be monitored a minimum of three times per year There is no evidence that the current two times a year sampling regimen is not providing valid characteristic data. Additional costs of analyzing all the new analytes and labor associated with adding another round of sampling is unnecessary. Recommend retaining current two times a year sampling regimen.</p>	<p>City of Santa Monica</p>	<p>The monitoring frequencies are consistent with those in the MRP (CI 6948) for Order No. 01-182 as amended, which requires monitoring of the first storm event and a minimum of two additional storm events for each season. This is also consistent with the monitoring requirements in the current Ventura County MS4 Permit, issued by this Board in 2010.</p>	<p>None</p>
<p>General</p>	<p>Section III. F.2, VIII.C.2 states tentative permit states grab samples are prohibited and promotes composite sampling. No evidence that all the many years of grab samples collected for storm water to date were in any way not valid or characteristic. Further, the extreme variability in storm water discharges (turbulence, entrained solids, depth, flow velocity etc.) makes the use of composite sampling equipment impractical and infeasible, and not cost effective.</p>	<p>City of Santa Monica</p>	<p>The USEPA (USEPA 2002) recommends that multiple samples be taken throughout a storm event to incorporate changes in concentration and discharge and therefore accurately represent the storm event. While grab samples are appropriate for certain constituents and low flow dry weather sampling, composite sampling presents a more accurate representation of what the pollutant loading is from the MS4.</p>	<p>None</p>

Non-Storm Water Outfall Based Screening and Monitoring

Part IX.A.2.	Include “natural flows” or “natural sources” as a potential source of non-storm water flow.	LA Permit Group (Comment 30)	Natural flows have been added to the list consistent with Part III.A.1.d. of the Tentative Order.	Language revised
Part IX.E.	The permit provides flexibility to select the method by which Permittees determine significant non-stormwater discharges. Similar flexibility should be provided in setting priorities for source investigation. Flexibility should be provided such that an alternative approach could be submitted with the IMP or CIMP. It appears this flexibility is provided and we support this approach.	City of Los Angeles (Comment 98)	The Regional Board agrees that flexibility is already provided.	None
Part IX.E.2.	Revise last sentence to read, “100% of the outfalls in the inventory within 5 years...”	LA Permit Group (Comment 31)	Attachment E-MRP has been revised as suggested.	Language revised
Part IX.F.2.	Omit the requirement to report to the Regional Board “within 30 days of determination” because there are too many report submittals that could lead to a Notice of Violation that will have no impact on water quality. Reporting source identifications in the annual report provides central location for submittals.	LA Permit Group (Comment 32)	Attachment E-MRP has been revised as suggested.	Language revised
Part IX.F.3. & G	Requiring Permittees to monitor all significant non-stormwater discharges results in a disconnect between receiving water issues and monitoring, is inconsistent with some TMDL implementation schedules, and will result in Permittees being required to take action at drains that are not a priority as identified in the WMP. As an example of inconsistencies with receiving water issues, based on the data collected in Reaches 1, 3, 4, 5 and	City of Los Angeles (Comment 99)	The outfall-based monitoring does not require monitoring of all significant non-storm water discharges, only those non-essential non-storm water discharges whose source is unknown or are conditionally exempt. In addition, the outfall selection process is designed so that monitoring is not required at all outfalls at all times. With prioritization and adaptive management strategy, these outfall locations will shift over time. Furthermore, if after two years of monitoring, the MS4 is found not to be a source of the pollutant, the Permittee can request that the monitoring requirement be reduced or eliminated.	None

<p>the Burbank Western Channel (the reaches original listed in the TMDL), the LA River is meeting ammonia TMDL targets. Having MS4s in the LA River monitor for ammonia, as currently required, at all outfalls is not necessary since MS4 discharges are not causing an impairment as there is no impairment. Additionally, the Permit requires actions to be taken based on outfall data, even though there is no corresponding receiving water issue. As an example of inconsistency with a TMDL, the LA River Bacteria TMDL prioritizes outfall monitoring and implementation on a reach by reach basis. The intent was to require Permittees to focus efforts on the priorities as outlined in the TMDL. If outfall monitoring is required everywhere and action must be taken then there is no prioritization as required in the TMDL. Flexibility should be provided such that an alternative approaches could be submitted with the IMP or CIMP. Alternatives could include changes to the constituents monitored based on watershed priorities (i.e., not including constituents for which there is no receiving water impairment even though there is a TMDL or where a TMDL implementation schedule explicitly incorporates priorities). Additionally, alternatives to the monitoring approach could include conducting snap shot sampling events where all discharges over a short time period are sampled rather than spaced</p>		<p>The list of pollutants that must be monitored targets receiving water issues. Therefore, the outfall monitoring is directly connected to the receiving water. While outfall monitoring may not be specifically required within a TMDL, it may result in useful information on pollutant loading and will assist in implementing the permit requirement that all non-storm water discharges not otherwise authorized or conditionally exempt are prohibited from the MS4.</p> <p>The Regional Board disagrees that the “Permit requires actions to be taken based on outfall data, even though there is no corresponding receiving water issue”. The method of outfall selection and pollutants to be monitored are based on receiving water issues, such as indicated by past exceedances of receiving water limitations, 303(d) listing and TMDLs. Further action to control the pollutant in the discharge would then be required only if monitoring results show that the discharge from the outfall is contributing to the water quality problems.</p> <p>The above notwithstanding, Permittees may propose conditions under which significant non-storm water discharges will be monitored in its CIMP in conjunction with a Watershed Management Program, subject to Executive Officer approval.</p>	
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	out quarterly as currently required.			
Parts IX.G.	MS4 discharges are not the same as wastewater plant effluent which represents a single continuous discharge of typically consistent quality to receiving waters. Rather, urban runoff is episodic in nature. Furthermore, individual outfalls carry a minute percentage of the total flow in the receiving waters and as such toxicity observed in one outfall sample will likely have no affect on the receiving water. The current approach is appropriate for wastewater discharges but not urban runoff and they should be treated differently. The more appropriate approach for urban runoff is to identify whether toxicity exists in the receiving water, identify pollutants that are causing toxicity through toxicity identification evaluations (TIEs), and then incorporate monitoring of pollutants that are causing toxicity into the outfall monitoring. Please remove toxicity monitoring requirements from the non-stormwater outfall monitoring program.	City of Los Angeles (Comment 100)	Toxicity monitoring of significant non-storm water discharges has been eliminated, unless required by a TMDL monitoring plan, or where a TIE conducted in the downstream receiving waters is inconclusive.	Language revised
Parts IX.G.3. & IX.G.4.	Outfalls not subject to dry weather TMDLs that have significant dry weather flows should have continuous flow monitoring done for a quarter with water quality sampling done once at the beginning of that time period. If the water quality sampling indicates pollutant concentrations that exceed water quality standards, then the IC/ID investigation procedures should begin. If no water quality standards are	LA Permit Group (Comment 33)	Routine monitoring of non-storm water discharges is not required until Permittees have completed efforts to identify the source of the significant non-storm water discharge. Where these efforts are successful, and the discharge is eliminated, no further monitoring is required. However, where non-storm water discharges persistent, it is necessary to continue monitoring to track the quality of significant non-storm water discharges and their potential impact on receiving waters. Following one year of monitoring, the Permittee may submit a written request to	None

	<p>exceeded or the IC/ID investigation eliminates the source of pollutants, then that flow has been demonstrated NOT to cause or contribute to pollutant loading and should be stopped. To continue monitoring a site that is known NOT to cause or contribute to pollutant loading is a waste of resources and an unfunded mandate.</p>		<p>the Executive Officer of the Regional Water Board to reduce or eliminate monitoring of specified pollutants, based on an evaluation of the monitoring data demonstrating that the discharge has not exceeded applicable WQBELs, applicable non-storm water action levels, or water quality standards for other pollutants identified on the CWA section 303(d) list for the receiving water.</p> <p>This provision is required and/or authorized by federal law. (CWA section 308(a); 40 CFR sections 122.26(d)(2)(i)(F) and (d)(2)(iii)(D), 122.41(h), (j)-(l), 122.42(c), 122.44(i), and 122.48.) The Board has determined that this provision is necessary to determine compliance with the conditions of this permit and to determine the impacts of the permittees' discharges on receiving waters. Therefore, this requirement is not an unfunded state mandate.</p>	
<p>Screening and Monitoring Plan</p>	<p>6 months is not sufficient to develop a stand-alone outfall screening and monitoring plan. The same time should be allotted to prepare the IMP or the CIMP, and the non-storm water outfall based screening and monitoring plan. Recommendation Delete the phrase, "or within six (6) months of effective date of this Order."</p>	<p>County of Los Angeles</p>	<p>The Board agrees and will modify the time period to 1 year.</p>	<p>Language revised.</p>
<p>Definition of Significant Non-Storm Water Discharge</p>	<p>A one-time exceedance of an action level may occur due to a one-time discharge or conditions that may have caused or contributed to that exceedance. Since all major outfalls designated as having significant non-storm water discharges are prioritized for source identification, to minimize chasing after episodic exceedances, allow Permittees to focus resources on persistent discharges and exceedances.</p>	<p>County of Los Angeles</p>	<p>Permittees may propose as part of their non-storm water outfall screening and monitoring program, triggers for what constitutes a significant non-storm water discharge.</p>	<p>None</p>

	<p>Recommendation b. Discharges for which existing monitoring data consistently exceeds (three or more consecutive exceedances) non-storm water Action Levels identified in Attachment G of this Order may be considered significant non-storm water discharges.</p>			
Inventory of MS4 Outfalls with Non-Storm Water Discharges	IX.D.2.d. Description of receiving water at the point of discharge – If the monitoring location is far from the receiving water and does not directly discharge into the receiving water, by CWA definition it would not be an outfall and must be noted as a monitoring location.	County of Los Angeles	Attachment E-MRP has been revised to clarify outfall versus alternative monitoring locations such as manholes.	Language revised.
Inventory of MS4 Outfalls with Non-Storm Water Discharges	IX.D.2.i. Photographs of significant discharge – If the monitoring location is at a manhole, photographing the significant non-storm water discharge or indicators of discharge will be very costly due to the need for traffic control. It may not be possible to visually confirm the flow and take a photograph.	County of Los Angeles	Although Permittees should be able to photo-document most outfalls, the permit includes the language “where possible” to relieve Permittees of photographic documentation if safety concerns exist at monitoring location.	Language revised.
Inventory of MS4 Outfalls with Non-Storm Water Discharges	IX.D.2.k. All diversions either upstream or downstream of the outfall – Clarify how far upstream or downstream of the major outfall the diversion should be to be for it to be included.	County of Los Angeles	The intent of the provision is to note all diversions that divert upstream discharges that would otherwise exit at the outfall.	None
Inventory of MS4 Outfalls with Non-Storm Water Discharges	IX.D.2.l. Observations regarding discharge characteristics – If the monitoring locations are at manholes, visual confirmation of the existence of debris and floatables will be very costly due to the need for traffic control. It may not be possible to make a visual	County of Los Angeles	If Permittees are able to visually determine that an outfall has significant non-storm water discharge, then the Board assumes that visual confirmation of floatables/debris is feasible.	None

	confirmation.			
Definition of “Other Outfalls”	<p>“Other outfalls” is used without a definition. “Outfall” is clearly defined per 40 CFR §122.26(b)(9). The Permit should not use “other outfalls” to refer to manholes or other potential points of monitoring.</p> <p>Recommendation Conform to the definition of “outfall in 40 CFR § 122.26(b)(9)</p>	County of Los Angeles	The Board will use a different term for monitoring locations that are not outfalls per the definition in 40 CFR section 122.26(b)(9).	Language revised.
Monitoring – Prioritized Source Identification	<p>Outfall inventory activities are ongoing and can change over time. Current language doesn't account for outfalls that may have new sources of non-stormwater discharges. For example, 50 outfalls are found in 2017. Does this mean all 50 have to be sourced ID'ed that same year, based on it being 5 years from the effective date of the order? This provision should be reworded as follows: "The schedule shall ensure that source IDs are conducted for no less than 25% of the outfalls in the inventory within three years of the effective date of this order 25% of outfalls are source ID'ed from date of inventory, and 100% of outfalls within 5 years of the effective date of this order are source ID'ed from date of inventory."</p>	LACFCD (Comment 42); County of Los Angeles (Comment 162)	<p>Section IX.E.2 reads;</p> <p><i>“Each Permittee shall develop a source identification schedule based on the prioritized list of outfalls exhibiting significant non-storm water discharges. The schedule shall ensure that source investigations are conducted for no less than 25% of the outfalls in the inventory within three years of the effective date of this Order and 100% of the outfalls within 5 years of the effective date of this Order.”</i></p> <p>However, Permittees may propose alternative schedules in conjunction with an IMP or CIMP to ensure that a source identification is conducted for all outfalls identified as having significant non-storm water discharges within the five year term of the Order.</p>	None
Monitoring Non-Storm Water Discharges Exceeding Criteria	<p>Monitoring of significant non-storm water outfall discharges that have significant non-storm water discharges within 90 days of identification or EO approval of CIMP or IMP may not be logistically feasible.</p> <p><u>Recommendation</u></p>	County of Los Angeles	<p>Section IX.E.3 reads;</p> <p><i>“Alternatively, a Permittee may request an alternative prioritization and schedule from the Regional Water Board if it can demonstrate an equivalent level of source investigation and abatement through an approved IMP or CIMP.”</i></p>	None

	Allow Permittees to determine a reasonable number of outfalls or alternative monitoring sites with significant non-storm water discharges to monitor each year, cover all watersheds over the Permit term, enough to perform parametric and non-parametric statistical analysis to determine trends. Based on the process and timeline discussed above, allow at least 30 months to begin monitoring.		The language addresses the commenter's concerns. However, to postpone monitoring for two and a half years is too long. There will be insufficient time during the remainder of the permit term to collect adequate data on the characteristics of non-storm water discharges.	
Part IX.H.2	Collection of dry weather samples as composite samples rather than grab samples is unnecessary to characterize conditions during dry weather and will significantly increase the cost of sample collection without a commiserate benefit. Current Regional Board approved TMDL CMPs allow for grab samples during dry weather as do LA Region wastewater NPDES permit receiving water monitoring requirements. The requirement to collect flow-weighted composite samples should be removed.	City of Los Angeles (Comment 101)	In most cases, flow weighted composite samples provide for the most accurate determination of mass load and this method is consistent with how samples are collected at regional mass emissions stations. However, the Regional Board concurs with the comment. The MRP has been revised to clarify that in instances where grab samples are generally expected to be sufficient to characterize water quality conditions (primarily dry weather), that grab samples may be taken. Further, as already stated in IX.H.2, the Permittee can request the Executive Officer to approve an alternative sample collection protocol.	Language revised.
Non-Stormwater Outfall Based Monitoring	The identification of illicit discharges must adhere to the field screening requirements in CFR 40 §122.26. No non-stormwater discharge monitoring shall occur unless flow is first discovered at the outfall. This would trigger the implementation of additional requirements that the tentative order does not include.	Cities of Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, San Gabriel and West Covina	The outfall screening program is consistent with 40 CFR section 122.26(d)(2)(iv)(B)(2)-(3) – it first requires screening for significant non-storm water discharges, then a source identification process, and finally, monitoring only of those outfalls with continuing significant non-storm water discharge.	None
Non-Stormwater Monitoring	The focus and scope of non-stormwater monitoring is not commensurate with the environmental issues associated	City of La Verne	Water quality impairments during dry weather are pervasive throughout the coastal watersheds of Los Angeles County. TMDLs have identified non-storm water	None

<p>with dry weather flows. We believe the non-stormwater monitoring should be to help identify illicit discharges and not for assessing the multitude of objectives noted in the MRP, II.E.a – c. Furthermore we would submit that the MS4s should focus its non-stormwater monitoring on discharges “into” the MS4 and not on discharges “through” or from our MS4s that may cause or contribute to exceedances of water quality standards. This is consistent with CWA section 402(p).</p>			<p>discharges as a source of pollutants leading to these water quality impairments. Clean Water Act section 402(p)(3)(B)(ii) requires the permit to effectively prohibit non-storm water discharges into the MS4. The permit includes such a prohibition and also provides for conditional exceptions to the prohibition. Any discharges of non-storm water from the MS4 that are not authorized or conditionally exempt from the prohibition would be a violation of the permit and are subject to requirements that apply to non-storm water. This includes conditionally exempt discharges that are found to be a source of pollutants to the MS4. Permittees are required to control discharges of pollutants from their MS4s. Non-storm water discharges from the MS4 that are not authorized by separate NPDES permits, nor specifically exempted, are subject to requirements under the NPDES program, including discharge prohibitions, technology-based effluent limitations and water quality-based effluent limitations. (40 C.F.R. § 122.44.) Thus, the Board can establish requirements that are designed to reduce pollutants in non-storm water from the MS4 to receiving water and to ensure that non-storm water discharges from the MS4 do not cause or contribute to an exceedance of water quality standards. The requirements that address non-storm water are consistent with Section 402(p)’s prohibition on non-storm water discharges. Any discharge of non-storm water into the MS4 must be prohibited, so it follows that a non-storm water discharge into the MS4 that goes through the MS4 and into the receiving water resulting in violations of water quality standards would be a clear violation of the prohibition. Monitoring of non-storm water is essential to determine compliance with the prohibition, including the conditional exceptions to the prohibition.</p>	
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New Development/Re-Development Effectiveness Tracking

<p>Part X.</p>	<p>This section should be moved to Section VI.D.6.d.iv. for clarity.</p>	<p>LA Permit Group (Comment 34)</p>	<p>Since this is a reporting requirement, it is appropriately included in Attachment E.</p>	<p>None</p>
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<p>Part X.</p>	<p>This list of effectiveness tracking does not match with the information provided on Section VI.D.6.d.iv. Also delete item 11 from the list since this is not a site specific feature and can be easily mapped for our region using rain gage data.</p>	<p>City of Los Angeles (Comment 102)</p>	<p>The development/re-development database required in Attachment E, section X is not intended to satisfy the post-construction BMP database requirements in Section VI.D.6.d.iv, although they may have similar components. The data required in Part X of Attachment E is necessary to evaluate the effectiveness of the Planning and Land Development provisions of the Order in terms of storm water retention, biofiltration and offsite mitigation.</p> <p>The requirement to provide the one-year, one-hour storm intensity as depicted on the most recently issued isohyetal map published by the Los Angeles County Hydrologist is necessary to ensure uniform design standards. The Regional Water Board cannot verify the accuracy of rain gauge data on a site-by-site basis.</p>	<p>None</p>
<p>New Development/ Re-development Effectiveness Monitoring</p>	<p>Without the determination of statistically significant exceedances of water quality standards, detected at the outfall, the imposition of runoff infiltration requirements is arbitrary. Further, there is nothing in federal stormwater regulations that require monitoring on private or public property. Monitoring, once again, is limited to effluent discharges at the outfall and to ambient monitoring in the receiving water.</p> <p>Beyond this, monitoring for BMP effectiveness poses a serious challenge to what determines “effectiveness” -- effective relative to what standard? It is also not clear how such monitoring is to be performed.</p> <p>Recommended Correction: Delete this requirement.</p>	<p>Cities of Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, San Gabriel and West Covina</p>	<p>The Board has eliminated the BMP monitoring requirement proposed in earlier working proposals. This requirement is only focused on tracking implementation of the planning and land development requirements in Part VI.D.7.</p>	<p>None</p>

<p>Part XI.</p>	<p>Omit this section on Regional Studies. Regional monitoring should be done by County, State and Federal agencies that have jurisdiction over pollutants of concern. It is a waste of municipal resources to have 85 Permittees all perform Pyrethroid and SCCWRP regional studies. This imposing of State responsibilities beyond Federal requirements on local municipal governments is an unfunded mandate. Please provide legal justification for this transfer of jurisdiction.</p>	<p>LA Permit Group (Comment 35)</p>	<p>The MS4 system is regional in nature and its discharges can affect water quality region-wide. Regarding the Southern California Stormwater Monitoring Coalition Watershed Monitoring Program requirements, the objective of the Federal Clean Water Act is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters (CWA section 101(a)). The requirement for Permittees to assess biological impacts of MS4 discharges on receiving waters is consistent with this objective. Biological assessment of receiving waters is necessary to evaluate cumulative effects of multiple pollutants discharged from the MS4. The Board has proposed regional monitoring to allow Permittees to coordinate resources and reduce costs. However, the pyrethroid regional study requirement has been eliminated.</p> <p>This provision is required and/or authorized by federal law. (CWA section 308(a); 40 CFR sections 122.26(d)(2)(i)(F) and (d)(2)(iii)(D), 122.41(h), (j)-(l), 122.42(c), 122.44(i), and 122.48.) The Board has determined that this provision is necessary to determine compliance with the conditions of this permit and to determine the impacts of the permittees discharges on receiving waters. Therefore, this requirement is not an unfunded state mandate.</p>	<p>Revisions to eliminate requirement to conduct a pyrethroid study.</p>
<p>Part XI.A.</p>	<p>Monitoring for Pyrethroids is a task that requires samples to be sent to special laboratories outside city/EMD that are equipped with instruments to analyze the eight compounds to detection levels as close to 1 ng/g dry weight. Therefore preparing the samples to be analyzed individually and reporting is not feasible in 90 days, and requires more time than analysis of the samples in-house. Request to reporting of the data to be extended to 150 days from sample collection date.</p>	<p>City of Los Angeles (Comment 103)</p>	<p>The requirement to conduct a pyrethroid study has been eliminated from the MRP.</p>	<p>Requirement removed.</p>

<p>Part XI.B.</p>	<p>SMC monitoring program requiring each MS4 to sample 6 sites from different land uses in their watershed and report on a common data base equates to 90 sites. This monitoring is very comprehensive in answering a) what is the conditions of streams in s. California, b) what are the stressors that affect stream condition. Any additional monitoring as prescribed in stormwater outfall based and non-stormwater outfall based monitoring (E-17 to E-20) may be already conducted as part of SMC. Subsequently, additional monitoring based on this permit may be found to be duplicative. If outfall monitoring is conducted as part of SMC program, it would be included as part of IMP or CIMP to regional board.</p>	<p>City of Los Angeles (Comment 104)</p>	<p>If existing monitoring is redundant of new requirements, substitution of these data can be proposed by the Permittee in its IMP or CIMP.</p>	<p>None</p>
<p>Regional Studies – Southern California Stormwater Monitoring Coalition</p>	<p>San Bernardino should be added as a county storm water agency.</p>	<p>County of Los Angeles</p>	<p>The Board agrees and will note San Bernardino County as well.</p>	<p>Language revised.</p>
<p>Regional Studies</p>	<p>The Board should include bioassessment monitoring that is sufficient for determining receiving water trends and stormwater impacts on specific aquatic communities. The Board must include a defined semi-annual or annual bioassessment monitoring program with at least six fixed sites per watershed in the Permit as part of the “Core Monitoring” requirements. The Board should also discuss how the bioassessment results</p>	<p>Environmental Groups</p>	<p>The MRP requires Permittees to participate in the comprehensive bioassessment monitoring program by the SMC, in which each participating group assesses its local watersheds and then contributes their portion to the overall regional assessment. The program was set up with intensive studies and input from recognized experts. It is not only technically sound to require Permittee to participate in the SMC study, it is also cost effective. Permittees must report the result of the bioassessment in their annual report(s), and use these to modify their jurisdictional storm water management program or Watershed Management Program accordingly.</p>	<p>None</p>

	will be evaluated. If bioassessment results raise concern, the Permittee should be required to assess the impact and determine the source of impairment.			
Special Studies	Regarding regional studies (MRP XI.A – B), these studies should be conducted by the Regional or State Board. But if the permit does require special studies, the permit needs to establish the mechanism/option for permittees to participate in the studies without having to conduct the studies on an individual basis. Furthermore, the Regional Board should be the agency to lead and coordinate these studies. The MRP appears to read that each and every permittee must conduct the regional studies.	Cities of La Verne and Inglewood	The requirement to conduct a pyrethroid regional study has been eliminated. The MRP requires participation in the SMC monitoring effort, but does not require the Permittees to develop and implement a bioassessment program on an individual basis.	None
Regional Studies	Regional studies also lie outside the scope of the MS4 permit. However, because federal regulations require ambient monitoring in the receiving water, a task performed by the Regional Board’s SWAMP, regional watershed monitoring for aforementioned target pollutants can be satisfied through ambient monitoring. This can be accomplished with little expense on the part of permittees by: (1) using ambient data generated by the Regional Board SWAMP; (2) re-setting the County’s mass emissions stations to collect samples 2 to 3 days following a storm event (instead of using a flow-based sampling trigger); and (3) using any data generated from existing coordinated monitoring programs (e.g.,	Cities of Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, San Gabriel and West Covina	Regional Studies are designed to assess the impact MS4 discharges have on the receiving waters and associated habitat for wildlife. However, the Regional Board has eliminated the requirement for the pyrethroid special study.	Pyrethroid special study removed.

	Los Angeles River metals TMDL CMP), provided that the data is truly ambient.			
<i>Aquatic Toxicity Monitoring Methods</i>				
Aquatic Toxicity	The toxicity monitoring is inconsistent with the 2010 USEPA guidance on toxicity monitoring, guidance released from the State Water Board in anticipation of the statewide Toxicity Policy, and the California Ocean Plan. For instance, sample hold time, sample volume, and the procedure for species selection in brackish and freshwater should be consistent with the above-mentioned guidance and polices.	Environmental Groups	The monitoring program was developed in consultation with USEPA. Methodologies in the MRP have been revised to be consistent with USEPA guidance and State Board plans and policies addressing toxicity.	Language revised
Aquatic Toxicity	The MRP should include enhanced aquatic toxicity outfall monitoring requirements. A once-per-year sampling regime will likely not capture toxic discharge. The Board should require outfall monitoring for toxicity four times per year, at a minimum, at the same time that the receiving water monitoring location is sampled. Also, the toxicity tests should continue for the term of the permit. The Permittee should select dischargers that are chronically flowing and that represent high-impact land uses such as transportation and industrial.	Environmental Groups	The monitoring program was developed in consultation with USEPA with a focus on identifying toxicity in receiving waters, and follow-up to identify the constituents causing the toxicity through TIE procedures. The revised MRP includes a stepwise process that relies upon aquatic toxicity monitoring and TIEs in receiving water followed by monitoring for toxicants in outfall discharges, or where TIEs are inconclusive in the receiving water, aquatic toxicity testing followed by TIEs/TREs of the outfall discharge.	Language revised
Aquatic Toxicity	Consistent with the 2010 USEPA guidance and current drafts of the statewide Toxicity Policy, the MRP should require toxicity data to be reported for the Test of Significance Toxicity statistical method.	Environmental Groups	The toxicity requirements have been revised to require statistical analysis methods following the USEPA toxicity test hypothesis testing procedures for the t-test approach.	Language revised.
Aquatic Toxicity	The Board should clarify the TIE/TRE processes for acute and chronic	Environmental Groups	The revised toxicity language clarifies the TIE/TRE processes. These requirements also include TIE	Language revised.

	<p>toxicity. Why does the Board not require a TIE for chronic toxicity? Logically, one should identify the cause of toxicity prior to efforts to reduce the toxicity.</p>		<p>procedures if chronic toxicity is found.</p>	
<p>Aquatic Toxicity monitoring methods</p>	<p>The toxicity monitoring methods required appear to be based on wastewater treatment plant toxicity testing requirements. The application of a wastewater approach is inappropriate for monitoring related to urban discharges and effects in receiving waters. Additionally, LA MS4 permits are the only MS4 permits we are aware of that require outfall toxicity monitoring and prescribe follow-up requirements that are essentially the same as wastewater plants. This section should be revised so that the approach is appropriate for addressing MS4 issues.</p>	<p>City of Los Angeles (Comment 105)</p>	<p>Methodologies in the MRP have been revised to be consistent with USEPA guidance and State Board plans and policies addressing toxicity.</p>	<p>Language revised.</p>
<p>Aquatic Toxicity of MS4 discharges is inappropriate</p>	<p>MS4 discharges are not the same as wastewater plant effluent which represents a single continuous discharge of typically consistent quality to receiving waters. Rather, urban runoff is episodic in nature. Furthermore, individual outfalls carry a minute percentage of the total flow in the receiving waters and as such toxicity observed in one outfall sample will likely have no affect on the receiving water. The current approach is appropriate for wastewater discharges but not urban runoff and they should be treated differently. The more appropriate approach for urban runoff is to identify whether toxicity</p>	<p>City of Los Angeles (Comment 106)</p>	<p>The monitoring program has been revised in consultation with USEPA with a focus on identifying toxicity in receiving waters, and follow-up to identify the constituents causing the toxicity through TIE procedures. The revised MRP includes a stepwise process that relies upon aquatic toxicity monitoring and TIEs in receiving water followed by monitoring for toxicants in outfall discharges, or where TIEs are inconclusive in the receiving water, aquatic toxicity testing followed by TIEs/TREs of the outfall discharge.</p>	<p>Language revised.</p>

	exists in the receiving water, identify pollutants that are causing toxicity through toxicity identification evaluations (TIEs), and then incorporate monitoring of pollutants that are causing toxicity into the outfall monitoring. Please revise so that the toxicity monitoring requirements are only applicable to receiving water monitoring.			
Aquatic Toxicity Monitoring Methods	Using flow-weighted composite sampling protocols is reasonable and acceptable for wet weather events. For dry weather events, flow rates rarely vary much over time. Requiring flow-weighted composites for dry weather will cause costly and time consuming effort to calculate pace flow volumes for mostly previously unmonitored outfall sites. Recommendation Add language to allow affected agencies to utilize time-weighted composite non-storm water sampling.	County of Los Angeles	The Board agrees and has incorporated the suggested language. Grab samples may also be allowed for dry weather, where the grab sample will adequately characterize the sample event.	None
Aquatic Toxicity	Omit all the requirements for Aquatic Toxicity Monitoring. Regional monitoring should be done by County, State and Federal agencies that have jurisdiction over pollutants of concern. It is a waste of municipal resources to have 85 Permittees all perform aquatic toxicity regional studies. This imposing of State responsibilities beyond Federal requirements on local municipal governments is an unfunded mandate. Please provide legal justification for this transfer of jurisdiction.	LA Permit Group (Comments 21, 26, 29, & 36)	The Board disagrees that this is a transfer of jurisdiction. Aquatic toxicity testing is required to ensure that MS4 discharges do not impair beneficial uses. However, the monitoring program has been revised in consultation with USEPA to focus on identifying toxicity in receiving waters, and follow-up to identify the constituents causing the toxicity through TIE procedures. The revised MRP includes a stepwise process that relies upon aquatic toxicity monitoring and TIEs in receiving water followed by monitoring for toxicants in outfall discharges, or where TIEs are inconclusive in the receiving water, aquatic toxicity testing followed by TIEs/TREs of the outfall discharge.	Attachment E-MRP (Aquatic Toxicity Monitoring) revised

			This provision is required and/or authorized by federal law. (CWA section 308(a); 40 CFR sections 122.26(d)(2)(i)(F) and (d)(2)(iii)(D), 122.41(h), (j)-(l), 122.42(c), 122.44(i), and 122.48.) The Board has determined that this provision is necessary to determine compliance with the conditions of this permit and to determine the impacts of the permittees discharges on receiving waters. Therefore, this requirement is not an unfunded state mandate.	
Part XII.F.1.	The MRP is not the appropriate place within a NPDES permit to assign receiving water and/or effluent limitations within a permit. Currently Part XII.F.1.a&b essentially sets toxicity effluent limitations. Part XII.F.1.a&b should be removed.	City of Los Angeles (Comment 107)	The Basin Plan contains water quality standards for toxicity. It is appropriate for the MRP to include monitoring to assess compliance with toxicity objectives to assess compliance with water quality standards and other permit provisions. The MRP does not set toxicity effluent limitations, but rather establishes thresholds for conducting a TIE.	None
Part XII.F.2.	Part XII.F does not clearly state under what flow conditions acute toxicity testing should be conducted. Additionally, Part XII.F.2.c states that Permittees may elect to report midpoint results from a chronic test as acute results. However, acute testing should only be conducted during wet weather and chronic testing should only be conducted during dry weather. Conducting a seven day (168 hours) toxicity test to evaluate the effects of storms in the LA region that typically only result in elevated flows for less than 48 hours provides no relevant information on receiving water conditions. Similarly, requiring acute testing during dry weather when conditions are stable provides no relevant information on receiving water conditions. Additionally, acute effects will be observed in chronic tests.	City of Los Angeles (Comment 108)	<p>The conditions under which toxicity testing should be conducted are the same as those for other parameters.</p> <p>Methodologies in the MRP have been revised to be consistent with USEPA guidance and State Board plans and policies addressing toxicity.</p> <p>Regarding the appropriateness of acute versus chronic toxicity testing of storm water samples, monitoring methods must be appropriate for identifying both acute and chronic impacts. In storm events, the concentration of concern is 100% storm water, therefore chronic is most protective of both acute and chronic impacts, as would be the case with a 100% effluent dominated scenario. The duration of the storm event does not need to match the duration of the toxicity test. In fact, there are several chronic toxicity tests that are less than 96 hours and utilize a single water sample. The duration of the toxicity test is necessary to elicit the biological endpoint, such as reduction in growth, reproduction, larval development, etc. Additionally, as cited in the Storm Water Effects Handbook, A Toolbox for Watershed Managers,</p>	Language revised.

	<p>Please clarify that acute toxicity testing is to be conducted during wet weather. At a minimum, do not limit the ability of Permittees to use data generated during chronic tests to calculate acute endpoints to top smelt as currently proposed.</p>		<p>Scientists and Engineers by Burton and Pitt (2003), laboratory testing of storm water samples has been shown to have acute and chronic toxicity effects to a variety of species. Additionally, pesticide pulses from storm water discharges have been studied in different watersheds and have been shown to remain toxic for days to weeks after the runoff event (Kuivila and Foe, 1995; Werner et al. 2000). Therefore, the MRP has been revised to require only chronic toxicity tests.</p>	
Part XII.F.2.c.i.	<p>The proposed TIE triggers are based on wastewater permitting and are not appropriate for MS4 monitoring. The proposed thresholds should be replaced with a 50% mortality threshold consistent with the approach recommended in guidance published by USEPA for conducting TIEs (USEPA, 1996, Marine Toxicity Identification Evaluation. Phase I Guidance Document EPA/600/R-96/054), which recommends a minimum threshold of 50% mortality because the probability of completing a successful TIE decreases rapidly for samples with less than this level of toxicity. Additionally, experience in conducting TIEs in receiving waters in the region supports using a higher percent mortality trigger to provide a reasonable opportunity for a successful TIE. During TMDL monitoring in the Calleguas Creek Watershed (CCW) in 2003 and 2004, TIEs were initiated on samples exceeding the 50% threshold (the majority of which displayed 100% mortality. In that study, toxicity degraded in approximately 40% of the samples on which TIE procedures were</p>	<p>City of Los Angeles (Comments 109 & 113)</p>	<p>The methodologies, including triggers for conducting TIEs, have been updated in consultation with USEPA. The trigger for conducting a TIE is set at a Percent Effect Value (of either the sublethal endpoint or survival endpoint) equal to or greater than 50% at the Instream Waste Concentration (IWC), as suggested by the commenter.</p>	<p>Language revised.</p>

	<p>conducted making the results inconclusive (and effectively useless in pinpointing specific toxicants). The Regional Board approved monitoring program for the CCW Toxicity TMDL utilizes a 50% threshold for TIE initiation. If a 50% threshold is an acceptable approach for a toxicity TMDL that focuses on receiving water issues as well as various types of discharges (i.e., MS4, agriculture, and wastewater) it should also be acceptable in a MS4 permit. The City is not opposed to conducting TIEs, rather, TIEs should be initiated where there is a reasonable chance of successfully identifying the pollutant(s) causing toxicity. As such, the proposed TIE trigger should be replaced with a threshold of 50% mortality.</p>			
<p>Part XII.G.3.</p>	<p>Part XII.G.3 does not clearly state under what flow conditions chronic toxicity testing should be conducted. Chronic testing should only be conducted during dry weather. Conducting a seven day (168 hours) chronic toxicity test to evaluate the effects of storms in the LA region that typically only result in elevated flows for less than 48 hours provides no relevant information on receiving water conditions. Similarly, requiring acute testing during dry weather when conditions are stable provides no relevant information on receiving water conditions. Additionally, acute effects will be observed in chronic tests. Please clarify that chronic toxicity</p>	<p>City of Los Angeles (Comment 110)</p>	<p>The conditions under which toxicity testing should be conducted are the same as those for other parameters.</p> <p>Methodologies in the MRP have been revised to be consistent with USEPA guidance and State Board plans and policies addressing toxicity.</p> <p>Regarding the appropriateness of acute versus chronic toxicity testing of storm water samples, monitoring methods must be appropriate for identifying both acute and chronic impacts. In storm events, the concentration of concern is 100% storm water, therefore chronic is most protective of both acute and chronic impacts, as would be the case with a 100% effluent dominated scenario. The duration of the storm event does not need to match the duration of the toxicity test. In fact, there are several chronic toxicity tests that are less than 96 hours and utilize a single water sample. The duration of the toxicity test is</p>	<p>Language revised.</p>

	<p>testing is to be conducted during dry weather.</p>		<p>necessary to elicit the biological endpoint, such as reduction in growth, reproduction, larval development, etc. Additionally, as cited in the Storm Water Effects Handbook, A Toolbox for Watershed Managers, Scientists and Engineers by Burton and Pitt (2003), laboratory testing of storm water samples has been shown to have acute and chronic toxicity effects to a variety of species. Additionally, pesticide pulses from storm water discharges have been studied in different watersheds and have been shown to remain toxic for days to weeks after the runoff event (Kuivila and Foe, 1995; Werner et al. 2000). Therefore, the MRP has been revised to require only chronic toxicity tests during both wet weather and dry weather conditions.</p>	
<p>Part XII.G.3.</p>	<p>Notwithstanding the previous comments requesting the removal of outfall toxicity testing, the requirement to conduct three species testing at outfalls will result in a significant additional cost (essentially tripling of costs) without a demonstrated benefit. Furthermore, requiring re-screening every 24 months will result in screening every six wet weather and four dry weather events. Re-screening at this frequency is based on wastewater monitoring. Re-screening requirements are not included in the monitoring requirements for the Ventura County Waiver for Irrigated Lands which addresses discharges similar (i.e., episodic and transient) to MS4 discharges. Please remove the requirement for the three species testing and require Permittees to propose an appropriate species. At a minimum, remove the re-screening requirements such that screening is conducted only once within the permit</p>	<p>City of Los Angeles (Comment 111)</p>	<p>Three species screening to determine the most sensitive species is important. Three species need only be tested for 2 wet weather and 2 dry weather events. After this screening, subsequent aquatic toxicity testing only must be done on the most sensitive species.</p> <p>The MRP has been revised to require re-screening only in the 4th year in order to determine the most sensitive species for the next permit cycle.</p>	<p>Language revised.</p>

	term.			
Part XII.G.3.a.viii	See above comments regarding the requirement for toxicity monitoring at the outfall. Remove Part XII.G.3.a.viii.	City of Los Angeles (Comment 112)	The permit has been revised in order to explain the limited scenarios under which outfall monitoring for toxicity shall occur.	Language revised.
TRE Requirements	It is inappropriate to place wastewater program elements such as the Toxicity Reduction Evaluation (TRE) in an MS4 permit. The MRP is focused on identifying individual constituents that are causing or contributing to receiving water impairments such that information is available to develop and implement control measures. Requiring Permittees to implement a TRE subverts the process by which they will identify and address water quality issues. Please remove all references to TREs.	City of Los Angeles (Comment 114)	TIE/TREs are appropriate in any NPDES permit in order to identify the toxicant(s) that are causing effects to organisms living in receiving waters. The MRP has been revised to explain under what circumstances these need to occur.	Language revised.
Part XII.G.4.	It is unclear if this provision is requiring Permittees to conduct accelerated monitoring. If so, it is inappropriate to place wastewater program elements such as accelerated monitoring into an MS4 permit. MS4 discharges are not the same as wastewater plant effluent which represents a continuous discharge of typically consistent quality. Rather, urban runoff is episodic in nature. The current approach is appropriate for wastewater discharges but not urban runoff and they should be treated differently. The more appropriate approach for urban runoff is to identify the cause of toxicity if observed to exceed an appropriate threshold through toxicity identification evaluations (TIEs). It is not to require	City of Los Angeles (Comment 115)	The MRP has been revised to explain the required follow-up when toxicity is observed in receiving waters.	Language revised.

	accelerated monitoring, particularly if toxicity is observed during a wet weather event. Please remove all references to additional/accelerated toxicity testing.			
Part XIII.I.	The MS4 Permittees conduct a TIE when sediment toxicity is observed as required by Toxics TMDL (e.g. Ballona Creek Estuary). TRE has been traditionally required for toxicity of effluent of POTWs. All of the BMPs included in the implementation plans discuss the adaptive measures implemented to reduce the toxics. Subsequently TRE will be unnecessary and will be a duplicative effort when TIE is conducted. Recommend to remove all provisions and requirements for TRE workplan in this section.	City of Los Angeles (Comment 116)	The Board disagrees. TIE/TREs are appropriate in any NPDES permit in order to identify the toxicant(s) that are causing acute or chronic effects to organisms living in receiving waters. The permit has been revised to explain under what circumstances these need to occur.	Language revised.
Toxicity Monitoring	Toxicity monitoring should be limited to the receiving water only and not at the outfalls. It's important to establish whether if toxicity is an issue in the receiving water before conducting expensive monitoring at the outfalls. Furthermore, recent Department of Pesticide Regulations has severely limited the use of pyrethroid based pesticides, thus calling into question the need for expensive toxicity monitoring, especially at outfalls. Finally, if a study is necessary, the Regional Board should lead the study	City of La Verne; City of Inglewood	The MRP has been revised to explain the monitoring requirements for toxicity in receiving waters and what triggers outfall monitoring. Further, the requirement to conduct a pyrethroid study has been eliminated.	Language revised.
Aquatic Toxicity Monitoring	The toxicity monitoring methods required appear to be based on wastewater treatment plant toxicity testing requirements. The application of a wastewater approach is	City of Los Angeles	The procedures and methodologies for aquatic toxicity monitoring and testing have been updated after consultation with USEPA and are consistent with USEPA guidance and State Board plans and policies addressing toxicity.	Language revised.

	<p>inappropriate for monitoring related to urban discharges and effects in receiving waters. Additionally, LA MS4 permits are the only MS4 permits we are aware of that require outfall toxicity monitoring and prescribe follow-up requirements that are essentially the same as wastewater plants. This section should be revised so that the approach is appropriate for addressing MS4 issues.</p>			
<p>Toxicity Monitoring</p>	<p>KLI further concluded that the toxicity monitoring requirements could have a large impact on costs because of the large sample volumes required to allow both toxicity and chemistry monitoring. They also questioned the capacity of bioassay laboratories in Southern California to handle the large volume of samples.</p> <p>In addition, KLI concluded that the present toxicity identification evaluation (TIE) requirements would add substantial costs to the program without providing useful information. They indicated that TIEs have served a purpose and will continue to play an important role in the identification of toxicants, but they argued that they should be used judiciously. KLI further suggested that simple measurements of chemicals currently known to be of concern are normally sufficient to identify problems without the added expense of numerous TIEs</p>	<p>City of Signal Hill</p>	<p>The toxicity requirements have been revised to focus on the receiving water and move to outfall monitoring under defined conditions. This will provide substantial cost reductions while providing a logical path to identification and remediation of sources of toxicity. TIE requirements still serve a purpose and are necessary to identify the source of toxicity.</p>	<p>Language revised.</p>
<p><i>Standard Monitoring and Reporting Provisions</i></p>				
<p>Parts XIV.I.1 & XIV.I.2</p>	<p>It is not reasonable to force Permittees to make changes to approved</p>	<p>LA Permit Group</p>	<p>Any changes to the MRP would be conducted through an open and transparent process. The permit clearly states</p>	<p>Change made as indicated.</p>

	Monitoring and Reporting Programs based on the whim of an “interested” party or “as deemed necessary by EO”. This provides unlimited power to interested parties or EO. Recommend these items be revised to include a caveat that there would be no additional costs or as approved by Regional Board, to make those changes open and transparent.	(Comment 37)	<p>that any changes to the MRP must be consistent with 40 CFR section 122.41 and only made by the Board or the Executive Officer after providing an opportunity for public comment. Because the permit requires this process before any changes to the MRP can be made, such changes will not be based on a “whim” and neither the Executive Officer or interested persons would have unlimited power. Additionally, this provision provides Permittees with the opportunity to request changes to the MRP.</p> <p>The Board generally has broad discretion to require monitoring and reporting requirements to ensure compliance with the permit. The Board may, however, increase or decrease monitoring and reporting requirements for good cause. A modification to monitoring requirements may result in increased costs or decreased costs. In addition, if the Executive Officer makes changes to the MRP that a permittee or interested person believes is technically or legally unsupported, Part VI.A.6. provides an “appeal” process to the Regional Water Board. Permittees and interested persons also have the right to file a petition with the State Water Board challenging any determinations made by the Executive Officer.</p>	
Part XIV.A.b.1.	This provision should state that, “This period may be extended by request of the Board Executive Officer or USEPA at any time <u>prior to the end of three years.</u> ”	County of Los Angeles (Comment 166)	The language is consistent with 40 CFR section 122.41(j)(2).	None
Parts XIV.L & XIV.M	Data should be required for submittal with annual reports. Requiring the submittal of data between 30 and 90 days will not allow Permittees to complete appropriate QA/QC of the data and provide additional information regarding the context of the data. Please remove the short term	City of Los Angeles (Comment 117)	The Board disagrees. Annual reports are summaries of MS4 activities and monitoring. Providing all monitoring data only in an annual report may allow too much time to lapse in those instances where an exceedance of a WQBEL, action level or a water quality objective is found. Submittal of monitoring data earlier will allow Permittees and the Regional Board to address water quality issues as they arise, leading to higher compliance	Language revised.

	turnaround requirements and require all data and supporting information be submitted with the annual reports.		rates and better water quality. This notwithstanding, the permit has been revised to require semi-annual reporting of data instead of the more frequent 30 to 90 day reporting, including highlighting all exceedances of water quality objectives.	
Part XIV.L.	The monitoring program required under this Permit would generate a very large amount of data including receiving water, TMDL, and outfall monitoring. To QA/QC, format, and analyze such a large amount of information is not feasible within 90 days of sample collection. Recommend increasing the time from 90 to 180 days.	County of Los Angeles (Comment 167)	The permit has been revised to require semi-annual reporting of data, including highlighting all exceedances of water quality objectives.	Language revised.
Part XIV.M.	Within 30 days of the determination and no later than 60 days after the receipt of the monitoring data is not sufficient time to do data analysis and determination. Recommend revising the language to read: “...within 30 <u>90</u> days of the determination and no later than 60 <u>120</u> days after receipt of the monitoring data”.	County of Los Angeles (Comment 168)	The permit has been revised to require semi-annual reporting of data, including highlighting all exceedances of water quality objectives.	Language revised.
Part XIV.M.	Omit section M. as it is redundant to section L.	LA Permit Group (Comment 38)	Sections L and M will be combined.	Language revised.
ANNUAL REPORT SUBMITTAL TIMELINES				
Part XV	As both the City and the Regional Board are working to increase e-submittals of materials please revise the submittal requirements for the annual report to be only via electronic.	City of Los Angeles (Comment 118)	The Order has been revised to allow only electronic submittals for the annual report.	Language revised.
WATERSHED SUMMARY INFORMATION, ORGANIZATION AND CONTENT				
Part XVII	The permit requires the submittal of watershed summary information in the	City of Los Angeles	The Order already allows Permittees participating in a WMP to submit the information in their draft WMP and	None

	<p>first year. However, Permittees will still be developing the requested information as part of the WMP. Rather than providing the requested information in year one as part of the annual report, it would be more efficient for Permittees that are participating in a WMP to submit the same information as part of the WMP submittal and then every odd year thereafter. Permittees that are not participating in a WMP could still be required to submit the information in year 1.</p>	(Comment 119)	<p>any updates thereto in lieu of providing the information in Years 1, 3, and 5.</p>	
<p>Watershed Summary</p>	<p><u>Section XVII Watershed Summary Information</u> The requested information shall be provided for each watershed within the permittees jurisdiction. Please clarify “watershed.” Is this meant to be Watershed Management Area or subwatershed HUC-12?</p>	City of Malibu	<p>The Order reads at Section XVIII.1.a; “The following information shall be included for each <i>Watershed Management Area</i> within the Permittee(s) jurisdiction, where not included in a WMPP.”</p>	None
<p>Annual Assessment and Reporting</p>				
<p>Aquatic Toxicity</p>	<p>Omit requirements XVIII.A.5.b. & XVIII.A.5.c.. Regional monitoring should be done by County, State and Federal agencies that have jurisdiction over pollutants of concern. It is a waste of municipal resources to have 85 Permittees all perform aquatic toxicity regional studies. This imposing of State responsibilities beyond Federal requirements on local municipal governments is an unfunded mandate. Please provide legal justification for this transfer of jurisdiction.</p>	<p>LA Permit Group (Comment 39)</p>	<p>The MS4 is regional in nature and its discharges can affect water quality region-wide. Regarding the Southern California Stormwater Monitoring Coalition Watershed Monitoring Program requirements, the objective of the Federal Clean Water Act is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters (CWA section 101(a)). The requirement for Permittees to assess biological impacts of MS4 discharges on receiving waters is consistent with this objective. Biological assessment of receiving waters is necessary to evaluate cumulative effects of multiple pollutants discharged from the MS4. The permit proposes regional monitoring to allow Permittees to coordinate resources and reduce costs. However, the pyrethroid regional study requirement has been eliminated.</p>	<p>Revisions to Attachment E to eliminate requirement to conduct a pyrethroid regional study.</p>

			<p>This provision is required and/or authorized by federal law. (CWA section 308(a); 40 CFR sections 122.26(d)(2)(i)(F) and (d)(2)(iii)(D), 122.41(h), (j)-(l), 122.42(c), 122.44(i), and 122.48.) The Board has determined that this provision is necessary to determine compliance with the conditions of this permit and to determine the impacts of the permittees' discharges on receiving waters. Therefore, this requirement is not an unfunded state mandate.</p>	
<p>Estimated Baseline Percent of EIA</p>	<p>XVII.A.3.b. & XVIII.A.1.a. - The purpose for these requirements is not clear and the burden is substantial. The requirement to determine the EIA baseline and the cumulative change in EIA would be extremely difficult due to the large and highly dense urban area within Los Angeles County. Recommendation Delete these requirements.</p>	<p>County of Los Angeles</p>	<p>The connection between EIA and receiving water quality has been noted in many studies. Runoff volumes are directly impacted by changes in EIA and are an important metric that warrants reporting. The estimated Total Impervious Area may be reported in lieu of EIA.</p>	<p>Language revised.</p>
<p>Rain Gauge Data Availability</p>	<p>XVIII.A.2.a. - LACDPW maintains 148 manually observed non-mechanical (Standard) rain gages and 126 ALERT (Automatic Local Evaluation in Real Time)/Automatic rain gages. Only the ALERT gauges can provide the precipitation data being requested by the Board. However, the ALERT gages are not considered official or final rainfall data, can be prone to transmission errors, and there is no guarantee of accuracy of the data provided. It should also be noted that it is not the LACDPW's mission or mandate to collect and provide rainfall data to other public agencies or to the public. Including such a requirement in the Permit in effect requires the</p>	<p>LACFCD (Comment 43)</p>	<p>The language has been revised to indicate that Permittees may obtain the precipitation data from the Los Angeles County DPW.</p>	<p>Language revised.</p>

	LACDPW to do so. In the event of diminished fiscal resources, the number of locations monitoring by ALERT gauges may be reduced. The language should be revised as follows: "Precipitation data shall be obtained may be requested from Los Angeles County Department of Public Works."			
Effectiveness Assessment of Storm Water Control Measures	XVIII.A.2.a. and XVIII.A.2.b – The MRP requires a rainfall summary that includes the highest "volume" event expressed in inches/24hrs. Inches of rainfall in a 24-hr period is not a "volume". Also, a watershed with high imperviousness can generate higher "runoff volumes" with lower "rainfall precipitation" than a watershed with low imperviousness and higher "rainfall precipitation". Recommendation Since it refers to a Rainfall Summary, revise to "event with the highest precipitation (inches/24hrs)."	County of Los Angeles	While the Board agrees that inches/24 hours alone is not a volumetric measurement, inches/24 hours over a drainage area does translate to a volumetric measurement. The language is adequate as-is.	None
Attachment E, XVIII.A.2.d, Effectiveness Assessment of Stormwater Controls	Part XVIII.A.2.d requires the following "For natural drainage systems, develop a reference watershed flow duration curve and compare it to a flow duration curve for the subwatershed under current conditions." This requirement is not appropriate for the City of Los Angeles, since only a very small part of the City drains into a natural drainage system and no reference subwatershed may be found since Los Angeles is substantially developed. The City of Los Angeles would accept in participating for a limited comparison study with other municipalities.	City of Los Angeles (Comment 120)	A natural drainage system is a drainage system that has not been improved (e.g., channelized or armored). The clearing or dredging of a natural drainage system does not cause the system to be classified as an improved drainage system. The Southern California Coastal Water Research Project has identified several natural watersheds in the Los Angeles Region that may serve as a reference watershed. The reference subwatershed does not need to be within the Permittee's jurisdiction. (See Hydromodification Assessment and Management in California, Technical Report 667 - April 2012, Eric D. Stein, Felicia Federico, Derek B. Booth, Brian P. Bledsoe, Chris Bowles, Zan Rubin, G. Mathias Kondolf, and Ashmita Sengupta.) Additionally, Permittees are encouraged to address this requirement cooperatively on a	None

	However we believe this condition will be applicable for permittees that have significant areas that drain to natural drainage systems.		watershed basis. However, if this is wholly inapplicable to a Permittee, because a Permittee does not have any area within a natural drainage system, the Permittee may indicate so in its annual report.	
Reference Watershed Flow Duration Curve for Natural Drainage System	XVIII.A.2.d - Stream gage information is necessary to develop a flow duration curve. Stream gauge information is limited to specific locations and is not available for all streams. Recommendation Revise as follows: "For natural drainage systems, develop a reference watershed flow duration curve and compare it to a flow duration curve for the subwatershed under current conditions, provided stream gauge information is available."	County of Los Angeles	For hydromodification control, flow information for natural drainage systems is crucial. Where necessary, a stream gauge may be installed.	None
Identifying Exceedances	XVIII.A.5.a - The reporting threshold should be set higher than a single exceedance (e.g., 3 exceedances in a row) to focus on persistent issues, not one time occurrences.	County of Los Angeles	All exceedences should be identified in the semi-annual transmittal of monitoring results and in the annual reports.	None
Annual Assessment and Reporting	<u>Section XVIII Annual Assessment Reporting</u> Does this requirement apply to Watershed Management Area or subwatershed HUC-12?	City of Malibu	The Order requires that the information in Part XVIII be provided for each watershed management area within a Permittee's jurisdiction. Where it is valuable to present this information by HUC-12 drainage area, Permittees are encouraged to do so.	None
TMDL Reporting				
Part XIX.B.	Only include schedules for IMP and CIMP for USEPA established TMDLs and revise those schedules to be 9 months for IMP and 24 months for CIMP. Having due dates for Monitoring and Reporting plans for IMP and CIMP past the due date established by the TMDL creates confusion.	LA Permit Group (Comment 40)	The permit allows the Permittees the flexibility to submit an IMP or CIMP, in lieu of a TMDL specific monitoring and reporting plan, which is the rationale for including the original TMDL deadlines and the deadlines for the IMP and CIMP which must be adhered to. The submittal schedules have been revised to align with the submittal dates for a Watershed Management Program, or 12 months.	Language revised.
TMDL	Section Monitoring & Reporting Santa	City of Malibu	The USEPA established TMDL contains wasteload	None

<p>Specific-SMB Toxics TMDL</p>	<p>Monica Bay TMDL for DDTs and PCBs This requirement is not justified. All of those listings which formed the basis for the TMDL should have been considered only after applying the current listing policy. Furthermore, a load based TMDL is ineffective for these beaches when the manufacture of PCBs is prohibited and federal EPA is considering further regulatory actions to control the release of PCBs. the sources or discharges of these contaminants seem to have dissipated and enforcing this TMDL upon agencies that had no evidence of causing or contributing to the water quality impairment is unjustified. Further, agencies not associated with the original discharge should not be held accountable for mitigation. The City of Malibu has no wastewater treatment plant outfall to discharge these pollutants and is certainly remote from point of discharge. It is troubling that this listing and TMDL exist based on a past Integrated Report placeholder with one LOE, but none of the data or information is available in the State's database. Review of the samples showed that none of the samples analyzed had detected any Chlorinated and Organophosphorous Pesticides, using EPA standard method 625, which includes analysis of DDT and PCB. The City, therefore, requests that additional monitoring and reporting requirements for DDT and PCB be removed.</p>		<p>allocations for MS4 discharges and therefore the WLA have been included in this Order as required. Permittees must conduct monitoring sufficient to determine compliance with permit provisions; therefore, monitoring of DDT and PCBs is necessary. If monitoring during the first two years indicates non-detectable levels of DDT and PCBs in MS4 discharges, Permittees may request a modification to the MRP to reduce the monitoring frequency for these constituents.</p>	
<p>SMBBB</p>	<p>The shoreline monitoring provisions of</p>	<p>South Bay</p>	<p>Permittees may propose changes to shoreline monitoring</p>	<p>None</p>

<p>TMDL</p>	<p>CI-6948 should be removed from the new permit monitoring program. At a minimum paragraph D.1.b should be removed and paragraph D.1.e.1 should be modified to remove stations S13 (SMB-5-1), S14 (SMB-5-3) S15 (SMB-5-5), S17 (SMB-6-5) and S18 (SMB-6-6).</p> <p>The following is proposed wording modification to Attachment E, Section IV.C.7:</p> <p>“7. Monitoring requirements pursuant to Order No. 01-182, except Section D.1.b is removed and Section D.1.e.1 is modified to removed sites S13, S14, S15, S17 and S18 of the Monitoring and Reporting Program - CI-6948, shall remain in effect until the Executive Officer of the Regional Water Board approves a Permittee(s) IMP and/or CIMP plan(s)</p>	<p>Cities</p>	<p>in an IMP or CIMP. Until approval of the IMP and/or CIMP, the monitoring requirements pursuant to Order 01-182 remain in effect.</p>	
<p>Costs</p>				
<p>Costs</p>	<p>KLI concluded that the proposed monitoring in Attachment E to the draft order would drastically increase monitoring costs, largely because of the proposed wet-weather stormwater outfall monitoring and toxicity testing requirements. Because of the requirement to monitor at least one major outfall per subwatershed drainage area within a Permittee’s jurisdiction, the total number of outfalls monitored could be 200 or more. If the equipment purchase, installation, and</p>	<p>City of Signal Hill</p>	<p>The MRP has been revised to allow Permittees additional flexibility to develop a customized monitoring program in conjunction with a Watershed Management Program that includes the core elements as identified in the MRP and complies with the 5 core objectives. This allows the Permittees the flexibility to create the most cost effective monitoring program. Additionally, the MRP has been revised to remove requirements for routine outfall toxicity monitoring, and instead includes a stepwise process of first monitoring for toxicity in the receiving water, then conducting a TIE where significant toxicity is observed, and finally monitoring for the toxicants identified in the TIE in the outfall discharge. Finally, the requirement to</p>	<p>Language revised.</p>

	<p>operation of auto-sampler at 200 sites were to cost an average of \$75,000 each, there could be a first year cost of \$15 million for outfall monitoring. If each site were to cost \$100,000, the total cost to establish the stormwater outfall-based monitoring element of the monitoring program could be \$20 million</p>		<p>conduct a pyrethroid regional study has been eliminated.</p>	
<p>Cost</p>	<p>KLI concluded that continuing and expanding on the current approach will tremendously inflate the costs of monitoring without substantially increasing the likelihood of making measurable progress of meeting the Clean Water Act goals of “fishable and swimmable waters.” Specifically, KLI recommended that continued intensive annual mass-emission sampling be conducted during alternating permit cycles to track long-term trends. Continual intensive monitoring for TMDLs should be limited to the constituents of concern. Savings from decreased mass-emission monitoring could be directed toward special studies to identify whether stormwater discharges are having measureable impacts on beneficial uses.</p> <p>The City of Signal Hill recommends that Regional Board staff meet with KLI and other monitoring consultants to refine the Monitoring and Reporting Program</p>	<p>City of Signal Hill</p>	<p>Improved monitoring requirements have been added to this permit in order to better assess compliance with permit conditions and the effects of MS4 discharges on receiving waters.</p> <p>Additional flexibility has been incorporated in the Order to allow Permittees to implement cost saving measures in the CIMP and IMP as long as the basic 5 objectives and elements of the MRP are met. This provides opportunities for efficiencies through coordinated monitoring and customization of monitoring requirements in conjunction with a Watershed Management Program. The toxicity monitoring program has also been streamlined, which offers significant cost savings. The pyrethroid study has also been eliminated.</p>	<p>Revisions to Attachment E-MRP, Parts VIII.B.1.c.vi, IX.G.d, and XI.A. and Part VI.B of the Order</p>

	to make it more practicable and less costly.			
Outfall Monitoring	The whole of the new outfall monitoring program represents an extremely expensive endeavor. This needs to be completely revised in order to make it economically viable. As part of one or more TMDL groups, the Cities are facing a shared cost of hundreds of thousands of dollars in monitoring costs. The costs for this additional outfall monitoring, which will include testing for post-construction treatment system evaluation and additional programs for pyrethroid studies, even if limited to HUC-12 units of approximately 20 square miles of tributary area will be economically unachievable. Attachment E should be listed as "items that could be included in a monitoring plan" and this program will then be developed over the next several years.	Cities of Temple City; Monterey Park (Comment 10); and Downey (Comment 13)	The CIMP compliance option allows Permittees the ability to collaborate on monitoring in a cost effective manner. Additional flexibility has also been incorporated in the Order to allow Permittees to implement cost saving measures in the CIMP and IMP as long as the basic 5 objectives and elements of the MRP are met. Furthermore, requirements to test (i.e., collect and analyze effluent samples) from post-construction treatment systems are not included in the order, and the requirement to conduct a pyrethroid study has been eliminated.	Language revised.
Costs	Attachment E represents an enormous cost and goes far beyond what would be required for an integrated TMDL monitoring program. More time is needed to provide detailed comments specific to the Palos Verdes Peninsula Recommend this Attachment be advisory in nature until permittees and the Regional Board can further discuss.	Peninsula Cities	Improved monitoring requirements have been added to this permit in order to better assess compliance with permit conditions and the effects on receiving waters. Monitoring requirements have been reduced in the revised tentative order (e.g., significant reductions in the toxicity monitoring program, elimination of the pyrethroid special study) and opportunities for efficiencies through coordinated monitoring and customization of monitoring requirements in conjunction with a Watershed Management Program have been provided.	MRP revised
Costs	One component of the Tentative Order where staff included new and expanded requirements without serious	City of Signal Hill	Improved monitoring requirements have been added to this permit in order to better assess compliance and effects on receiving waters.	MRP revised

	<p>consideration of costs is the Monitoring and Reporting Program. This component and the inclusion of TMDL implementation requirements are the major drivers of the increased costs associated with the new Los Angeles County MS4 permit(s). Our city was so concerned about the complexities and potential costs of the expanded Monitoring Program that we enlisted the assistance of Kinnetic Laboratories, Incorporated (KLI) to review the proposed new monitoring requirements and the proposed Municipal Action Levels. Their comments are found in Attachment 1 to this letter. Many of their comments relate to the cost impacts of the new requirements. KLI's overall assessment is that "The Draft Monitoring and Reporting Program in the tentative order will drastically increase monitoring costs." They go on to say that "We strongly believe that the programs, as currently specified, will only lead to magnification of current monitoring costs without any substantial improvements in addressing the real issue of assuring that beneficial uses are maintained in the receiving waters." KLI's specific comments on elements of the Monitoring Program are addressed below in the monitoring comments section of this letter.</p>		<p>The Regional Board has reduced some of the monitoring requirements (e.g., significant reductions in the toxicity monitoring program, elimination of pyrethroid special study) in the revised tentative and have provided opportunities for efficiencies through coordinated monitoring and customized monitoring programs submitted in conjunction with a Watershed Management Program.</p>	
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California Regional Water Quality Control Board, Los Angeles Region
Los Angeles County MS4 Permit
Response to Comments on the Tentative Order
WATERSHED MANAGEMENT PROGRAM MATRIX

Section/Topic	Comment	Commenter(s)	Response	Change Made
USEPA TMDLs	Section E.3.a (page 114): It is not clear from the Tentative Permit whether this was a grammatical oversight or a purposeful intent for cities such as Downey subject to a US EPA TMDL not to be given the option of implementing the MCM (as all other permittees are) in lieu of developing a WMP. For permittees such as Downey which are in multiple TMDL watersheds, it should be clear that Management Area Programs established by permittees for US EPA TMDL do not apply to the entire City unless specifically designated as such within the Watershed Management Program.	Downey; Norwalk	<p>Watershed Management Programs are voluntary and may be developed jointly by all Permittees within a watershed, or individually. However, because USEPA TMDLs do not contain an implementation program, if a Permittee does not choose to develop a Watershed Management Program Plan for USEPA TMDLs, the Permittee will need to demonstrate compliance with the numeric WLAs established in the USEPA TMDLs immediately based on monitoring data collected under the MRP of the Order.</p> <p>Where a Permittee chooses to develop a Watershed Management Program, the Permittee is only responsible for carrying out the Watershed Management Program(s) in the portions of their jurisdictions that lay within the watershed addressed by the WMP.</p>	None
USEPA TMDLs	<p>Please make these two provisions consistent with each other on multiple points as follows:</p> <p>Clarify at VI.C.1.e. that a Permittee may submit an</p>	Peninsula Cities Detailed; SMBBB Detailed	The Regional Water Board encourages the joint development of Watershed Management Programs by all Permittees within a watershed; however, Permittees may elect to develop a Watershed Management Program individually for the portion of their jurisdiction within a particular watershed. The order has been revised to make this clarification. Furthermore, for Watershed	Language of Part VI.C.1.e and Part VI.E.3.b was revised.

	<p>individual Watershed Management Program Plan.</p> <p>Clarify at VI.E.3.b. that a Permittee may jointly submit a plan with some or all Permittees subject to the WLAs contained in the USEPA established TMDL.</p>		<p>Management Programs to implement USEPA TMDLs, Permittees may either individually or jointly – with some or all Permittees within the watershed – submit a WMP. The order has been revised to make this clarification.</p>	
<p>Sources Beyond Control of Permittees</p>	<p>The draft order seems to be silent on the critical issue of sources of pollutants outside the authority of MS4 permittees (e. g. aerial deposition, upstream contributions, discharges allowed by another NPDES permit, etc.). We request that permittees be allowed to demonstrate that some sources are outside the permittee’s control and not responsible for managing or abating those sources</p>	<p>Inglewood; La Verne</p>	<p>The permittees have ultimate authority and responsibility to prohibit, prevent, or otherwise control discharges that enter and exit the portions of the MS4 for which they are owners and/or operators. Even if the permittees do not themselves generate the pollutants entering/exiting their MS4s, the permittees are nevertheless responsible for ensuring that the pollutants do not reach receiving waters through their MS4. As recently stated by the 9th Circuit Court of Appeals, “the Clean Water Act does not distinguish between those who add and those who convey what is added by others - the Act is indifferent to the originator of water pollution.” (<i>NRDC v. County of Los Angeles</i> (2011) 673 F.3d 880, 900.) Thus, the Clean Water Act, and this permit, appropriately places responsibility for preventing or controlling MS4 discharges on the permittees.</p> <p>Municipalities are also required to have the legal authority to control sources of pollutants to the MS4 under 40 CFR section 122.26(d)(2)(i), including the ability to control the contribution of pollutants from one portion of the MS4 to another portion through inter-agency agreements among Co-Permittees, and to implement measures to control the sources of pollutants to the MS4 through their Storm Water Management Program (SWMP). The order addresses Permittees’ legal authority to control pollutant discharges into and from its MS4 in Part VI.A.2.a. The order also addresses</p>	<p>None</p>

			discharges authorized by a separate individual or general NPDES permit in Part III.A.1.a., which identifies these discharges as authorized non-storm water discharges, and Part III.A.4.e., which provides a mechanism for notifying the Regional Water Board if an exceedance of a receiving water limitation is caused by an authorized non-storm water discharge with coverage under a separate NPDES permit.	
TMDL Compliance	The permit needs to clearly state that watershed management programs and the reasonable assurance analysis can be used for TMDL compliance purposes.	Inglewood; La Verne	The order states in Part VI.E.2.d.i.(4) that a Permittee shall be considered in compliance with an applicable interim water quality based effluent limitation and/or receiving water limitation for the pollutant(s) associated with a specific TMDL if the Permittee has submitted and is fully implementing an approved WMP pursuant to Part VI.C. It is premature to consider application of this WMP compliance demonstration option to the final effluent limitations and final receiving water limitations – most of which have deadlines outside the term of the tentative order. More data are needed to validate assumptions and model results regarding the linkage among BMP implementation, the quality of MS4 discharges, and receiving water quality to have the necessary assurance that these BMPs will ultimately achieve the final effluent limitations. The Regional Water Board will evaluate the effectiveness of this WMP compliance determination approach in ensuring that interim effluent limitations for storm water are achieved during this permit term. The tentative order has been revised to include a re-opener prior to the final compliance deadlines, if practicable, that would allow an action based, BMP compliance demonstration approach with regard to final WQBELs for storm water discharges based on the Regional Board’s review of relevant research on storm water quality and control technologies and the effectiveness of the approach in achieving interim WQBELs.	Re-opener provision added to Part VI.A.7
Adaptive	The permit should clarify that the adaptive	City of La Verne	Section 122.26(d)(2)(iv) of Title 40 of the Code of Federal Regulations requires Permittees to have a	Revisions to Part VI.C. to address

	<p>management process is equivalent to the iterative process described in the Receiving Water Limitation provision and provide the legal justification for the adaptive management process.</p>		<p>management program that includes a continuing planning process. Additionally, the maximum extent practicable (MEP) technology standard applied to storm water pursuant to CWA section 402(p)(3)(B)(iii) has been described as an “ever evolving” standard; adaptive management is therefore necessary to achieve the MEP standard.</p> <p>The adaptive management process outlined in Part VI.C.7 is similar to the iterative process in Part V.A.3. In the case of water body-pollutant combinations addressed by a TMDL, the adaptive management process is directed and governed by any interim WQBELs and associated compliance schedules. For water body-pollutant combinations not addressed by a TMDL, For water body-pollutant combinations not addressed by a TMDL, the Order has been revised to allow Permittees to develop and implement a Watershed Management Program to address receiving water limitations not otherwise addressed by a TMDL. The Watershed Management Program must include, at the outset, a reasonable assurance analysis for the water body-pollutant combination(s) addressed by the program that demonstrates that the watershed control measures proposed in the program will be sufficient to control MS4 discharges such that they do not cause or contribute to an exceedance of the applicable receiving water limitation(s). Where exceedances of receiving water limitations are newly identified after approval of a Watershed Management Program, Permittees are required to address these during the adaptive management process by evaluating the sources of the exceedances, identifying watershed control measures to address MS4 contributions of the pollutant to receiving waters, conduct a Reasonable Assurance Analysis to ensure that the watershed control measures will be sufficient to control the discharge of the pollutant, and identify requirements and milestones and dates for their achievement that will result in compliance with</p>	<p>water body pollutant combinations not otherwise addressed by a TMDL.</p>
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			receiving water limitations as soon as possible. A Permittee’s full compliance with all requirements and dates for their achievement in an approved Watershed Management Program will constitute compliance with the receiving water limitations in Part V.A. addressed by the program, including the “iterative process” in Part V.A.3. Additionally, Part VI.C.7.a.ii.(1) states that the WMP adaptive management process fulfills the requirements in Part V.A.4 to address continuing exceedances of receiving water limitations.	
Adaptive	The adaptive management/iterative approach and timing should be consistent between individual permittees (“jurisdictional watershed management program”) and the watershed management program.	City of La Verne	The tentative order has been revised such that evaluation and adaptive management for WMPs is required every two years after approval of the WMP. Where a Permittee chooses to not develop a WMP, Attachment E – MRP, specifies an annual evaluation of the jurisdictional SWMP. For Permittees that do not choose to develop a WMP, the baseline SWMP requirements are already established in the order, and adaptive management can begin after the first year of permit implementation.	Revisions to Part VI.C.7
Adaptive Management	There should be only one revision of the Watershed Management Programs required during the Permit term, and only when the monitoring data supporting the adaptive management/iterative process demonstrates that the modification is warranted.	Peninsula Cities Detailed; SMBBB Detailed; City of Torrance Detailed; La Verne	The Regional Board acknowledges the effort required to comprehensively evaluate and modify the WMP through the adaptive management process. Therefore, the tentative order has been revised to require the adaptive management process for WMP only once every two years after approval of the WMP. This will equate to once during the five-year permit term.	Revisions to Part VI.C.4 – Table 9 and Part VI.C.7.a.i
Adaptive Management	Eliminate the separate jurisdictional requirements of Part IV.6.b. entirely as it is redundant with Part IV.6.a.	Peninsula Cities Detailed; SMBBB Detailed; City of Torrance Detailed; La Verne	The tentative order has been revised to remove these requirements for Permittees that elect to participate in a Watershed Management Program.	Deletion of Part VI.C.7.b
Implementation	The timelines to develop new watershed	City of El Segundo; City of Hidden	The Regional Board acknowledges the effort involved in developing a collaborative WMP among a group of	Revisions to Table 9

	<p>management programs are too short.</p>	<p>Hills; Inglewood; Malibu; Vernon; Pomona; Torrance; Santa Monica</p>	<p>Permittees. It should be noted that in many cases significant effort has already been invested by many Permittees in developing TMDL implementation plans in these watersheds, and the Regional Water Board expects that Permittees will use these plans as a foundation to build upon as they develop their WMPs. It is also critical to ensure that there are not delays in implementation of storm water management measures, and therefore, the Board balanced the time necessary to develop a WMP with consideration of the time that would be remaining in the permit term to implement approved WMPs. However, in further consideration of these concerns, the order has been revised to allow 18 months for Permittees to jointly develop a WMP, if the Permittees commit to implementation of certain early actions during the development of the WMP. The timeframe for Permittees who elect to individually develop a WMP, or for those who do not commit to certain early actions, will remain at one year for submittal of a draft WMP plan.</p>	<p>Revisions to Part VI.C.4.c.</p>
<p>Implementation</p>	<p>It is unclear how the current implementation of the stormwater program and TMDL compliance will be handled during the interim period before development of the watershed management program. For those entities that choose this path, significant efforts in existing programs and implementation plans should be allowed to continue while we evaluate new MCMs as part of the watershed management program.</p>	<p>City of La Verne</p>	<p>The tentative order has been revised to clarify that Permittees are required to continue to implement their existing storm water management programs, including actions within each of the six categories of minimum control measures consistent with 40 CFR section 122.26(d)(2)(iv), and implement watershed control measures sufficient to achieve WQBELs and receiving water limitations applicable to the Permittee(s) pursuant to Part VI.E. and Attachments L-R in satisfaction of deadlines occurring prior to approval of the Watershed Management Program.</p>	<p>New subpart under Part VI.C.4.</p>

Implementation	Six months is not enough time to prepare preliminary analyses and obtain necessary funding allocations to make a decision whether or not to participate in a Watershed Management Program.	City of Malibu; Santa Monica	The Regional Board selected the timeline for notification in order to ensure steady progress toward developing a WMP early in the permit term, and in consideration of the anticipated schedule for a final outcome of the LA County Flood Control District's Water Quality Funding measure, which is expected by late Spring 2013.	None
Public Review	<p>Any Alternative Requirement Must Include a Public Review Process and Hearing before the Regional Board</p> <p>The Draft Permit currently allows for creation of Watershed Management Programs or use of Local Ordinance Equivalence programs to replace the Permit's LID requirements. Any provision that deviates from the Permit's LID performance criteria and/or other core Planning and Land Use requirements must go through the process of public review and hearing before the Regional Board.</p>	TreePeople	The Board may delegate certain actions to its Executive Officer, including approval of Watershed Management Programs. In addition, the order includes a provision (Part VI.A.5) that requires public review of all documents submitted to the Regional Water Board Executive Officer for approval. Additionally, Part VI.A.6 provides that any formal determination or approval made by the Executive Officer may be reviewed by the Regional Water Board. A Permittee or a member of the public may request such review within 30 days of such decision by the Executive Officer.	None
Feasibility of Compliance	Consideration of the technical and financial feasibility of complying with water quality standards should be	City of La Verne	The Board considered technical and financial feasibility when it adopted the water quality objectives. (See <i>In re Los Angeles County Municipal Storm Water Permit Litigation</i> (Sup. Ct. Los Angeles County, March 24, 2005, Case No. BS 080548), Statement of Decision from	None

	<p>included in the watershed management program.</p>		<p>Phase II Trial on Petitions for Writ of Mandate, p. 21.) In addition, the Board considered the technical and financial feasibility of each TMDL during the TMDL adoption process. Recognizing the effort required to attain TMDL WLAs, the Regional Board established implementation schedules that allow Permittees to implement watershed control measures over time. These long implementation schedules – many from 18 to 25 years long -- allow costs to be spread out over many years and allow time for technological innovation and advances.</p> <p>The Watershed Management Program option allows permittees to submit a plan, either individually or in collaboration with other permittees, that would allow for actions to be prioritized based on specific watershed needs. In the end, it is up to the permittees to determine the effective BMPs and measures needed to comply with this permit. Permittees can choose to implement the least expensive measures that are effective in meeting the requirements of the permit.</p>	
<p>General</p>	<p>Part VI.C of the Permit does not appear to provide cities wishing to participate in a Watershed Management Program the option of developing their own programs, outside of the Watershed Management Program, to remain consistent with the requirements of the Permit. For example, a watershed group may develop a Watershed Management Program for TMDL and Monitoring purposes, and choose to implement the Minimum</p>	<p>City of Hidden Hills; City of Pomona</p>	<p>Individual Permittees participating in a Watershed Management Program may choose to implement some or all of the baseline requirements of Part VI.D without any customization. Part VI.C.3.b.iv.(4)(e) states that each WMP plan shall identify the responsibilities of each participating Permittee for implementation of watershed control measures, which include the minimum control measures traditionally included in a Permittee’s SWMP. An individual Permittee may specify its responsibilities under the Watershed Management Program as including implementation of the baseline provisions identified in Part VI.D of the order, as well as other responsibilities related to implementation of other provisions of the order, including those related to TMDLs in Part VI.E. and Attachments L through R of the order.</p>	<p>None</p>

	<p>Control Measures as currently prescribed by the Permit. This may not be appropriate for all cities participating in the Watershed Management Program. Individual permittees, when participating in a Watershed Management Program, should be able to choose which elements of the Program they will participate in and which elements they will opt out of, preferring to comply with those elements as stated in the Permit. The City therefore requests that the Permit include clarifying language enabling individual permittees to participate in certain elements of the Watershed Management Program while providing the individual permittees the flexibility to otherwise comply, on their own, with the Permit</p>			
<p>General</p>	<p>Recommend that language be clarified to explicitly provide the option of development of a Watershed Management Program by one or more permittees which would address multiple watersheds and associated</p>	<p>Peninsula Cities Detailed</p>	<p>A group of Permittees could elect to develop multiple Watershed Management Programs and integrate these into one comprehensive plan as long as the comprehensive plan met the requirements of Part VI.C for each individual watershed addressed.</p>	<p>None</p>

	TMDLs at once within those jurisdiction(s)' boundaries.			
General	Provision VI.C.3.b.iv.(4)(e) that Watershed Management Program plans clearly identify the responsibilities of each participating Permittee for implementation of watershed control measures. This measure should protect conscientious Permittees from being held liable for the actions or inactions of other Permittees. We would appreciate confirmation of our interpretation that the provision provides protection against joint and several liability related to the actions or inactions of "bad actors." Making this clear in the permit will help convince every Permittee that it will be held responsible for its own actions or inactions, and that it will not be possible to hide and depend on the actions of other entities for protection	City of Signal Hill	<p>Where a Permittee elects to develop a Watershed Management Program and is fulfilling its responsibilities as identified in Part VI.C.3.b.iv.(4)(3), it will be considered in compliance with Parts III.A.4 and VI.D, receiving water limitations in Part V.A. that are explicitly addressed by the WMP, and interim WQBELs and receiving water limitations in Part VI.E and Attachments L-R.</p> <p>The permit addresses the comment concerning joint and several liability by allowing permittees who may have commingled discharges to establish a plan for determining compliance.</p>	None
General	We question the language of Provision VI.C.1.f.iii	City of Signal Hill	The monitoring and assessment program must be designed to, and measure, progress relative to applicable	None

	<p>related to executing a monitoring and assessment program to determine progress toward achieving applicable limitations and/or action levels. We understand that the Regional Board would prefer to have a numeric indicator to monitor progress toward achievement of applicable water quality standards, but we are concerned with the wording of the requirement.</p> <p>Specifically, we believe that the proposed wording is insufficient to prevent diversion of time, effort, and money due to third-party lawsuits based on temporary exceedances. The wording of the Provision should be modified to state that the monitoring and assessment program should be based on true benchmarks – indicators, rather than compliance points – designed to promote an adaptive management process during the implementation period.</p>		<p>WQBELs and receiving water limitations. The revised tentative order allows compliance to be demonstrated through implementation of actions in an approved WMP for receiving water limitations in Part V.A., and interim WQBELs and interim RWLs per Part VI.E.2.c and Part VI.E.2.d.i.(4).</p> <p>Additionally, the monitoring program includes municipal action levels for storm water to promote a prioritization and adaptive management.</p>	
<p>General</p>	<p>Include a statement such as, “The Watershed Management Program</p>	<p>City of Torrance Detailed</p>	<p>The Fact Sheet for the order enumerate some of the benefits of a watershed management program identified by the commenter, including reduced cost of improving</p>	<p>None</p>

	<p>provides flexibility to allow Permittees to develop an integrated watershed management program to address all of the water quality effluent requirements of this order in a cost efficient and effective manner. The Watershed Management Program provides the flexibility to allow Permittees to coordinate efforts on a watershed or subwatershed basis to leverage resources in an effort to increase cost efficiency and effectiveness and to closely align Watershed Management Programs with Integrated Monitoring approach</p>		<p>water quality and increased effectiveness.</p>	
<p>General</p>	<p>VI.C.3.a. 47 This section seems to be focused only on TMDLs; however an integrated plan needs to also address water quality RWL and MAL pollutants of concern Revise sentence as follows “...water quality based effluent limitations and/or receiving water limitations established pursuant to TMDLs, RWLs and MALs, as set forth...”</p>	<p>City of Torrance</p>	<p>The order identifies three categories of water body-pollutant combinations that should be addressed in a WMP. These are: 1) those for which WQBELs and/or RWL are established pursuant to a TMDL in Part VI.E. and Attachments L through R; 2) those that are identified on the CWA section 303(d) List and MS4 discharges may cause or contribute to the impairment; and 3) those that exceed RWLs and MS4 discharges may cause or contribute to the exceedance. Municipal action levels (MALs) are a tool that can be used to prioritize drainage areas for BMP implementation.</p>	<p>None</p>

<p>General</p>	<p>VI.C.3.b.i. 47 This whole section 3. seems to focus on water bodies and then on whole watersheds. To implement the most effective BMPS the Permittees much identify the High Priority sub-watersheds that contribute the greatest pollutant loads. Revise VI.C.3.b.i. to read, “Permittees shall identify strategies, control measures and BMPs to implement through their individual storm water management program or watershed management program, that can be implemented by watershed, sub-watershed or by jurisdiction, with the goal of creating an integrated efficient program to focus individual and collective resources on watershed priorities.”</p>	<p>City of Torrance Detailed</p>	<p>The Regional Board expects that Permittees will identify high-priority drainage areas within which to implement watershed control measures. One tool that can be used to prioritize subwatersheds that contribute the greatest pollutant loads is municipal action levels (MALs). However, the ultimate goal is to implement measures through the watershed to achieve applicable WQBELs and/or to ensure that MS4 discharges do not cause or contribute to exceedances of RWLs.</p>	<p>None</p>
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General	<p>Page 45 Section VI.C.1.b Participation in a WMP is voluntary ...</p> <p>Will the Board provide a template to which all WMPs should be tailored?</p>	City of Santa Monica Detailed	The Regional Board does not anticipate providing a template. However, Regional Board staff will be available to work with Permittees as they develop WMPs. Additionally, several local examples of WMPs exist and can be used by Permittees to help guide the development of their WMPs.	None
General	<p>Page 46 Section Table Submit draft plan to Regional Water Board ...</p> <p>reference in Part column should be VI.C.2.c, not VI.C.2.b.</p>	City of Santa Monica Detailed	The reference in Table 9 has been corrected.	Revisions made
General	<p>Page 47 Section Table 9 Submit final plan to Regional Water Board ...</p> <p>reference in 'Part' column should not be VI.C.2.c, the latter refers to draft plan, not final plan. Perhaps an additional subsection "e" describing the final plan (due in 3 months) is missing under VI.C.2?</p>	City of Santa Monica Detailed	The reference in Table 9 has been deleted for clarity.	Revisions made
General	<p>Page 47 Section Table 9 Begin implementation ...</p> <p>Due date column states upon submittal of final plan; VI.C.4 states upon approval of the plan. Does this mean that submittal of final plan constitutes approval by Regional Water Board EO?</p>	City of Santa Monica Detailed	Table 9 has been revised to state, "upon approval of final plan by Regional Water Board Executive Officer."	Revisions made

<p>General</p>	<p>Page 47 Section 2.d. ... do not elect to develop WMP . .</p> <p>City requires more time to compare the costs of doing a WMP with other Permittees vs. going alone and complying with Part VI.E.2.d.i in lieu of a WMP. Might be cheaper to do latter but do not know unless we do an economic analysis. The permit is not clear who has to do this analysis; assume the city, and this will require staff time, e.g. cost.</p>	<p>City of Santa Monica Detailed</p>	<p>The order provides Permittees with sufficient time -- an approximately 7½-month period from order adoption (50 days between the adoption date and the effective date of the order plus six months) -- to evaluate whether they will pursue an individual or a collaborative WMP.</p>	<p>None</p>
<p>General</p>	<p>Page 47 Section 3.a.i . . . Shall identify water quality priorities . . .</p> <p>Include an evaluation of existing water quality conditions, characterize storm water. New requirement. New cost. The city has to do this. Request the Board to tell us how a priority is defined and why this is required if the priorities are the WQBELs and receiving water limits. Seems like duplicative work and extra cost. City believes that the Board should do evaluation and</p>	<p>City of Santa Monica Detailed</p>	<p>Development of a WMP is voluntary. However, where a Permittee chooses to develop a WMP, the requirement to identify water quality priorities based on a water quality characterization addresses federal requirements in 40 CFR sections 122.26(d)(1)(iv) and 122.26(d)(2)(iii), which require MS4 permittees to provide information characterizing the quality and quantity of discharges covered by the permit, and 40 CFR section 122.26(d)(2)(iv), which requires permittees to develop a management program that describes priorities for implementing controls. Section 122.26(d)(2)(iv) states that these management programs may be established on a watershed basis.</p>	<p>None</p>

	<p>characterization, and inform the city of why this is necessary.</p>			
General	<p>Page 48 Section 3.a.iii.(1) Source Assessment</p> <p>New requirement. New costs. City requests that the Board identify known and suspected pollutant sources, or inform the City why it needs to do it. Request the Board to inform the city if a report to the Board is required. Request Board to define "Findings." The City already manages its stormwater program and reports in annual report. These appear to be new requirements to report on. Request the Board to define what is a watershed model, and validate why the city has to do this and what the report should contain. City requests a template.</p>	City of Santa Monica Detailed	<p>Development of a WMP is voluntary. However, where a Permittee chooses to develop a WMP, the requirement to identify known and suspected storm water and non-storm water pollutant sources is consistent with federal requirements in 40 CFR sections 122.26(d)(1)(iii) and 122.26(d)(2), which require MS4 permittees to identify known and potential sources of MS4 discharges to receiving waters.</p> <p>"Findings" in this part refers to the conclusions reached by the Permittee based on a review of available data.</p> <p>Regarding watershed models, inclusion of this information in a Permittee's source identification and water quality characterization is consistent with 40 CFR section 122.26(d)(2)(ii)-(iii), which discusses estimates of pollutant load that may be based on modeling data. Many TMDLs to which Permittees are subject included watershed modeling in their development. Permittees are required to review available data; if there are no available watershed model results then Permittees are not obligated to include this in their source assessment.</p>	None
General	<p>Page 49 Section 3.a.iv. Prioritization . . . Issues will be prioritized and sequenced . . . Other Receiving Water Considerations . . .</p> <p>(1) Request Board to</p>	City of Santa Monica Detailed	<p>Prioritizing and sequencing means ranking water quality priorities and scheduling actions to address the water quality issues according to their priority. The requirement to prioritize is consistent with 40 CFR section 122.26(d)(2)(iv).</p> <p>Watershed Management Programs are subject to Board or Executive Officer approval. Therefore, there will be</p>	None

	<p>define or explain the meaning of prioritizing and sequencing of issue, and why the Board is asking the City to do this and not the Board do. The city does not know if it prioritizes issues that the Board will agree to them.</p> <p>(2) City requests that the Board inform the city what data it needs to use for controlling pollutants as described in this section. The section is not clear on what the city has to do.</p>		<p>opportunity for Regional Water Board review of and input on the Permittee’s priorities prior to final approval of the WMP.</p> <p>Part 4.a. iv.(1)-(2) requires Permittees to enumerate, prioritize and sequence watershed priorities. “Controlling” is used in this context to express that the priority is to control pollutants in each of the categories in this part. Part 4.b. contains the requirements for Permittees to select watershed control measures to address the priorities in Part 4.a.iv.</p>	
General	<p>Page 48 Section VI.C.3.a.ii.(2) ... Pollutants for which data indicate water quality impairment in the receiving water ...</p> <p>Does this refer to pollutants of concern in the 303(d) list for which TMDL's will not be established, i.e. "TMDL Requirement Status C"?</p>	City of Santa Monica Detailed	<p>This part refers to water body-pollutant combinations that are included on the Section 303(d) List, but which are not yet being addressed by a TMDL.</p>	None
General	<p>Page 50 Section 3.b.2. Implement controls necessary to achieve all limitations . . .</p> <p>Board should inform city when this is due. If a city does not have enough funds to implement</p>	City of Santa Monica Detailed	<p>The deadlines for achieving interim and final WQBELs and receiving water limitations vary based on the TMDL-based compliance schedules included in Attachments L through R. These compliance schedules are based on those established in the TMDL, and consider the time necessary to plan, test and monitor results. If a Permittee anticipates that it will not be able to achieve compliance with the final WQBELs and receiving water limitations pursuant to the compliance</p>	None

	controls, there will be a long process to get voter approval, and voters may not pass new fees. A city does not know what controls are necessary without time to plan, test, and monitor over a specific time period, which is what the timeline follows for the Bay Bacterial TMDL. Would seem that a city will be out of compliance very soon into the permit if not as soon as the permit is executed.		schedule, a Permittee may request a time schedule order with justification to allow additional time to implement necessary controls to achieve the final WQBELs.	
General	<p>Page 51 Section iv.2, 3 Permittees identify . . . Permittees compile</p> <p>New requirement. New costs. City has to identify discharges and compile control measures into what? Request that the Board inform city of what document is required. Iv.3.c. refers to "the plan." Board needs to define this plan. It is not described in permit. Board should provide template.</p>	City of Santa Monica Detailed	<p>Watershed Management Programs are voluntary. However, the requirement to identify watershed control measures to address non-storm water discharges of pollutants is consistent with requirements in Parts III.A and IV.D.10, which are not new requirements. Addressing illicit discharges is required by 40 CFR section 122.26(d)(2)(iv)(B).</p> <p>Regarding the compilation of TMDL control measures, if a Permittee chooses to develop a WMP this is necessary to meet one of the fundamental objectives of a WMP, which is to identify and implement strategies, control measures, and BMPs to achieve WQBELs and receiving water limitations – many of which are derived from TMDLs to which Permittees are subject.</p> <p>The “plan” is the Watershed Management Program plan.</p>	None
General	Page 52 Section iv.4, 5 Each plan shall include . . . Permittees shall conduct Analysis . . .	City of Santa Monica Detailed	Watershed Management Programs are voluntary. However, this requirement is necessary to provide an adequate demonstration that the watershed control measures (i.e. BMPs) will be sufficient to achieve	None

	<p>New requirement. New costs. City requests that the Board define and describe what this Plan is. City has to ID BMPs, public and private; has to document each with lots of statistics; has to do a quantitative analysis, and modeling to prove BMPs will work. The city did this for Bacterial TMDL at great expense and dramatically increased the cost of compliance with no confirmed environmental improvement. Models are known to be inaccurate and not a reflection of what actually happens, vis-a-vis water quality. Installing BMPs, testing them, tracking improvements and failures, and changing the BMP program, without penalties and lawsuits, the iterative process is proven to work.</p>		<p>applicable WQBELs and receiving water limitations. See 40 CFR sections 124.8, 124.9, and 124.18. This is also consistent with USEPA guidance on developing permit requirements based on TMDL WLAs (USEPA 2002, 2010 memoranda).</p>	
<p>General</p>	<p>Pages 52-53 Section 3.c. Compliance Schedule</p> <p>New requirement. New cost. Staff time and resources to gather all the required data to develop and then follow the schedule, milestones,</p>	<p>City of Santa Monica Detailed</p>	<p>The compliance schedules contained in Attachments L through R are based on the implementation timelines adopted by the Regional Water Board and fully approved in the TMDLs to which the Permittees are subject. While an MS4 permit may include a compliance schedule that is shorter than the maximum time allowed by the TMDL implementation timeline, the permit's compliance schedule cannot be longer. (40 CFR §§ 122.44(d)(1)(vii)(B) and 122.47; Cal. Wat. Code §§</p>	<p>Table 9 – Watershed Management Program Implementation Requirements</p>

	<p>deadlines. City requests a longer timeline and schedule than in the existing draft permit.</p>		<p>13263 and 13377.) Additionally, if a compliance schedule exceeds one year, it must include interim milestones and dates for their achievement pursuant to 40 CFR section 122.47.</p> <p>Regarding the timeline for development of the WMP, the tentative order has been revised to allow for additional time where Permittees work collaboratively to develop a WMP, and where Permittees commit to certain early actions.</p>	
<p>General</p>	<p>Page 55 Section 6.b. Jurisdictional Stormwater Management Program Adaptive Process . . .</p> <p>New requirement. New cost. Request that the Board clearly describe, define that this section means, is, and the goal or purpose of it. Request the Board to clarify, why does a.i. which states "annually" differ from here, "at least annually"? Board should provide a template.</p>	<p>City of Santa Monica Detailed</p>	<p>This section has been deleted from the revised tentative order. Permittees that elect to develop a WMP will conduct the adaptive management process on a watershed scale per Part IV.C.7.a, while Permittees that do not elect to develop a WMP will conduct an adaptive management process on a jurisdictional basis as required in response to exceedances of receiving water limitations in Part V.A. and through the Permittee's annual reporting requirements in Attachment E – MRP.</p>	<p>Part VI.C.7.b deleted</p>

<p>Iterative Process</p>	<p>The Regional Board should also specifically reference Watershed Management Programs in Parts III and V in order to better integrate the Watershed Management Program provisions with the iterative process in the Discharge Prohibitions and the Receiving Water Limitations parts of the permit. In addition to achieving compliance with Order 99-05, such modifications to the proposed permit would foster implementation of the adaptive management process described in the Watershed Management Program provisions and reduce the vulnerability of the Permittees to enforcement actions and third-party lawsuits when they are engaged in an iterative (adaptive management) process through a watershed-based program to address exceedances of water quality objectives and water quality standards in a prioritized, systematic manner, as the Regional Board is encouraging with the incorporation of the Watershed Management</p>	<p>City of Signal Hill</p>	<p>Watershed Management Programs are voluntary; therefore, provisions related to how a Permittee can address other requirements of the order through a Watershed Management Program are kept within Part VI.C.</p> <p>For waterbody-pollutant combinations not addressed by a TMDL, Part VI.C. of the Order has been revised to allow Permittees to develop and implement a Watershed Management Program to address receiving water limitations not otherwise addressed by a TMDL. The Watershed Management Program must include, at the outset, a reasonable assurance analysis for the water body-pollutant combination(s) addressed by the program that demonstrates that the watershed control measures proposed in the program will be sufficient to control MS4 discharges such that they do not cause or contribute to an exceedance of the applicable receiving water limitation(s). Additionally, the Watershed Management Program must identify enforceable requirements and milestones and dates for their achievement to address the pollutants within a timeframe that is as short as possible. For pollutants that are in a similar class to those already addressed by a TMDL for the water body, the requirements, milestones and dates for their achievement must align with those established in the TMDL implementation schedule. A Permittee’s full compliance with all requirements and dates for their achievement in an approved Watershed Management Program will constitute compliance with the receiving water limitations in Part V.A. addressed by the program.</p>	<p>Revisions to Part VI.C.</p>
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	Program provisions into the permit.			
Design Storm	The City of Signal Hill requests that the permit be structured to use the runoff from the 85 th percentile, 24-hour storm event as a consistent design storm for both BMP design and enforcement of water quality standards. We have seen the Power Point presentation given by Dr. Youn Sim on the development of a water quality design storm at the 2011 CASQA Annual Conference. It builds on the work done by the Regional Board's design storm task force and presents a compelling argument for the 85 th percentile, 24-hour design storm for both design and enforcement. Such an action by the Regional Board would help convince municipalities that they are not wasting money by investing in BMPs and other control measures in the absence of a physical limit on the storm size for which they have to meet water quality standards	City of Signal Hill	The tentative order has been revised to provide Permittees with the option to develop an <i>enhanced</i> Watershed Management Program. An enhanced Watershed Management Program is one that comprehensively evaluates opportunities, with the participating Permittees' collective jurisdictional area in a Watershed Management Area, for collaboration among Permittees and other partners on multi-benefit regional projects to control MS4 discharges of storm water by, wherever feasible, retaining the 85 th percentile, 24-hour storm event for the drainage areas tributary to the projects, while also achieving other benefits including flood control and water supply, among others. Where retention of the 85 th percentile, 24-hour storm event is not feasible, the enhanced Watershed Management Program shall include a Reasonable Assurance Analysis to demonstrate that applicable water quality based effluent limitations and receiving water limitations shall be achieved through implementation of other watershed control measures. Permittees who elect to participate in such a program will be provided with a longer time period to develop an enhanced Watershed Management Program in recognition of the time necessary to establish partnerships, provide opportunities for meaningful stakeholder involvement and plan regional, multi-benefit projects. However, these programs must ensure that requirements to comply with (1) technology based standards (i.e. MEP), (2) other core provisions (e.g., elimination of non-storm water discharges of pollutants), and (3) WQBELs and RWL pursuant to TMDL compliance schedules with deadlines occurring prior to final approval of the enhanced WMP are not delayed. Further, Permittees must implement some early actions related to LID in order to be afforded the additional time to develop an enhanced WMP.	Revisions to Part VI.C.
True Source Control	The City is concerned that	City of Signal Hill	The reference to structural and non-structural controls is	None

	<p>Provision VI.C.3.b.iii (Watershed Control Measures) does not sufficiently recognize pollution prevention, including what the California Stormwater Quality Association (CASQA) has described as <i>true source control</i>. Signal Hill, other cities within the region, and the Coalition for Practical Regulation contributed financial support, lobbyist services, and support letters for CASQA’s efforts to address the major source of copper brake pad dust through a State legislative control measure, SB 346. The WMP section of the Permit should be re-written to recognize and encourage true source control as a pollution prevention measure that will ensure long-term compliance with water quality standards</p>		<p>intended to include pollution prevention measures, including “input change”, “operational improvement”, “production process change”, and “product reformulation” as defined in Cal. Water Code section 13263.3(b)(1).</p>	
<p>True Source Control</p>	<p>We acknowledge that Provision VI.C.3.b.IV(4) does recognize pollution prevention as a non-structural best management practice that can be included in Watershed Management Plans. However, we</p>	<p>City of Signal Hill</p>	<p>The order provides Permittees with flexibility to select the most effective watershed control measures to achieve permit requirements, including pollution prevention measures.</p>	<p>None</p>

	<p>believe that true source control, including product substitution and materials substitution, as well as product take-back, needs more emphasis in regional and statewide efforts to improve water quality</p>			
<p>TMDL Control Measures</p>	<p>VI.C.3.b.iv.(3) 51 In many cases the Watershed Management Program will identify BMPs that address multiple pollutants and multiple TMDLs, therefore “control measures” previously identified would need to be substituted by different BMPs with greater effectiveness, i.e. BMPs identified in existing TMDL Implementation Plans may not be appropriate for multiple pollutants. Revise (3) to read “Permittees shall list control measures that have been identified in TMDLs and corresponding implementation plans and identify those control measures to be modified to support the Reasonable Assurance Analysis for each TMDL</p>	<p>City of Torrance Detailed</p>	<p>The tentative order has been revised to add the following provision: “Permittees shall identify those control measures to be modified, if any, to most effectively address TMDL requirements within the watershed.”</p>	<p>Part VI.C.4.b.iv.(3) – Added sentence after 1st sentence</p>

<p>General</p>	<p>While the Fact Sheet indicates the WMP can be performed individually or collectively, the language in the WMP Provisions should affirm that WMPs can be done by one single Agency and/or a Watershed Group. In Part VI.C.1., add language that states “Permittees may participate in the Watershed Management Program individually or collectively” so that the Fact Sheet and Provision language are consistent.</p>	<p>LACFCD</p>	<p>The revised tentative order clarifies that a WMP can be developed and implemented by a Permittee individually or collaboratively with other Permittees in the watershed.</p>	<p>Part VI.C.1.e</p>
<p>General</p>	<p>Receiving Water Limitations have been repeatedly described as targets for which Minimum Control Measures and other BMPs should be designed. However, receiving water quality is the result of many other concurrent discharges besides MS4s, including nonpoint and instream sources. Receiving water limitations should not be considered as effluent targets.</p>	<p>County of Los Angeles</p>	<p>The revised tentative order has been clarified in several places that each WMP shall identify and implement strategies, control measures, and BMPs to ensure that MS4 discharges do not cause or contribute to exceedances of receiving water limitations, recognizing that there may be other types of non-MS4 discharges to a particular water body that may affect the overall quality of the receiving water.</p>	<p>Language has been revised in several places.</p>
<p>General</p>	<p>Part VI.C.1.d. should be revised to read: "The goal of the Watershed Management Programs is</p>	<p>County of Los Angeles</p>	<p>The tentative order has been revised as requested.</p>	<p>Part VI.C.1.d</p>

	to ensure that discharges from the Los Angeles County Permittees' MS4..."			
Attachment A	The definition of "Reasonable Assurance" that clearly states its criteria and legal justification should be added to Attachment A	County of Los Angeles	Federal regulations at 40 CFR sections 124.8, 124.9 and 124.18 support the permit provision that requires Permittees to conduct a reasonable assurance analysis. Furthermore, USEPA has stated in both its November 22, 2002 memo and its November 12, 2010 revision to the 2002 memo that the permit's record must provide an adequate demonstration that, where a BMP-based approach is selected, the BMPs required by the permit will be sufficient to implement applicable WQBELs. The permit requirement to conduct a reasonable assurance analysis is equivalent to "providing an adequate demonstration." Additional detail is provided in Part VI.C.4.b.(iv)(5) of the revised tentative order regarding the requirements for a Reasonable Assurance Analysis.	Revisions to Part VI.C.4.b.(iv)(5)
Attachment A	A definition of "Numeric Action Levels" should be added to Attachment A	County of Los Angeles	Non-storm water action levels are described in the Fact Sheet (Attachment F) Part XIII.F.1.c.i. "Approach for Deriving Action Levels". Municipal Action Levels (MALs) are described in Attachment G, Part VIII.	None
Process				
Timelines for Implementation	The timeline described in the permit fails to take into account the 2001 permit's requirements that Permittees develop and put into effect implementation plans, and that time and effort have already been spent in developing plans that may be applicable to the draft permit's requirements. Where plans have been properly implemented under the	Environmental Groups	The timelines in the order are reasonable and consistent with applicable timelines, in particular those established in TMDLs. Permittees are generally required to continue to implement their existing storm water management program and within 6 months of the effective date of the permit, implement any new or enhanced elements of their storm water management program requirements in Part VI.D.. If Permittees elect to develop a Watershed Management Program, which is voluntary, it is reasonable to allow time to develop a comprehensive plan, and to allow additional time where permittees elect to develop a WMP collaboratively and commit to early actions to be implemented concurrently with program development. The order requires ongoing	None to timelines for implementation of TMDL provisions; some changes to allow additional time for development of collaborative WMPs

	2001 permit, additional time should not be necessary. Where Permittees have failed to comply with permit requirements of their own devise, providing additional time only rewards prior poor performance.		implementation of a Permittee’s current storm water management programs during WMP development. While the tentative order has been revised to allow more time to develop collaborative WMPs, this is conditioned on Permittees’ commitments to early implementation actions.	
Timelines of Implementation	While implementing the WMP places Permittees in compliance with certain permit requirements, it is not clear if Permittees will be in compliance during the development phase. Furthermore, more clarity is needed on whether or not Permittees will continue existing programs during the development phase. Recommend language provided.	County of Los Angeles	The tentative order has been revised to clarify that Permittees electing to develop a WMP are required to continue to implement their existing storm water management programs, including actions within each of the six categories of minimum control measures, as well as watershed control measures to achieve WQBELs and RWL pursuant to Part VI.E. and Attachments L-R with compliance deadlines occurring prior to approval of the Watershed Management Program by the Regional Water Board Executive Officer.	Part VI.C.2.d – New provision added
Timelines for Implementation	The Board should synchronize the preparation of the draft WMP Plan with the integrated monitoring plan and provide sufficient time for data/information gathering and analyses to prepare the draft WMP Plan. The County recommends 2 years after Permit adoption date.	County of Los Angeles	The timelines for submittal of the WMP plan and the IMP or CIMP have been aligned in the revised tentative order.	Table 9 and Attachment E
Due date for implementation of	The proposed due date for start of implementation of	County of Los Angeles	The tentative order has been revised to state that implementation of the WMP shall begin upon approval	Table 9

WMP	<p>the WMP as listed in Table 9 is not consistent with the narrative in Part VI.C.4. Table 9 should be revised to state that the due date for beginning implementation of the WMP is "<u>Upon submittal approval of final plan by the Regional Water Board Executive Officer.</u>" The Board should also add an item to the table that provides a deadline for when the Board will approve the implementation plan.</p>		<p>of the final plan by the Regional Water Board Executive Officer.</p>	
<i>Program Development</i>				
Source Assessment and Control Measures	<p>Requiring Permittees to address 303(d) listing pollutants outside of a TMDL process in Part VI.C.3. forces Permittees to further spread their already scarce resources. The focus should be on TMDL pollutants. The Board should focus WMP efforts on TMDL pollutants (Category 1), and designate State (303(d)) Listing pollutants (Category 2) optional for source assessment, selection and implementation of control measures, etc. Or, as an incentive for Permittees to</p>	County of Los Angeles	<p>Where receiving waters are not meeting water quality standards due to MS4 discharges and the pollutant(s) is not already addressed by a TMDL, the Order has been revised to allow Permittees to develop and implement a Watershed Management Program to address receiving water limitations not otherwise addressed by a TMDL. For pollutants that are in a similar class to those already addressed by a TMDL for the water body, the requirements, milestones and dates for their achievement must align with those established in the TMDL implementation schedule. A Permittee's full compliance with all requirements and dates for their achievement in an approved Watershed Management Program will constitute compliance with the receiving water limitations in Part V.A. addressed by the program. Where MS4 discharges are causing or contributing to exceedances of receiving water limitations, and enhanced storm water and non-storm water controls are available to control the pollutants in the MS4 discharge, it is preferable to directly implement these through the</p>	Revisions to Part VI.C.

	<p>address non-Category 1 pollutants, the permit should provide that a Permittee will not be considered in violation of the receiving water limitations for a water body-pollutant combination not covered under a TMDL if that water body-pollutant combination is being addressed by an approved, expanded WMP.</p>		<p>Permittees' Watershed Management Programs rather than go through the administrative process of developing a TMDL first and then implementing these control measures.</p>	
<p>Sizing of Structural Controls</p>	<p>The staff working proposal required that structural controls be sized <i>at a minimum</i> to treat the volume of stormwater runoff from the 85th percentile, 24-hour storm. However, the tentative permit removed this item. To be consistent with the TMDL requirement (Part VI.E.2.d.4, page 113), re-insert this item from the working proposal and delete the "at minimum" language.</p>	<p>LACFCD</p>	<p>Part VI.E. of the tentative order has been revised to state that "Where necessary to achieve applicable WQBELs and receiving water limitations, structural storm water BMPs should be designed and maintained to treat storm water runoff from the 85th percentile, 24-hour storm at a minimum ..."</p> <p>The Regional Water Board recognizes that Permittees may employ a variety of control measures – both structural and non-structural. Therefore, the language has been provided to allow flexibility for Permittees to determine the best combination of measures and the most effective sizing for structural control measures to achieve applicable WQBELs and receiving water limitations. The purpose of the WMP is to give Permittees the flexibility to identify the most effective suite of watershed control measures to meet permit requirements. Therefore, the requirement for sizing of structural controls has not been included in Part VI.C. except in the case of an enhanced Watershed Management Program, discussed below.</p> <p>The tentative order has been revised to provide Permittees with the option to develop an <i>enhanced</i> Watershed Management Program. Recognizing the</p>	<p>Part VI.E.2.d.4</p>

			benefits of storm water capture and infiltration, an enhanced Watershed Management Program is one that comprehensively evaluates opportunities, with the participating Permittees' collective jurisdictional area in a Watershed Management Area, for collaboration among Permittees and other partners on multi-benefit regional projects to control MS4 discharges of storm water by, wherever feasible, retaining the 85 th percentile, 24-hour storm event for the drainage areas tributary to the projects, while also achieving other benefits including flood control and water supply, among others. Where retention of the 85 th percentile, 24-hour storm event is not feasible, the enhanced Watershed Management Program shall include a Reasonable Assurance Analysis to demonstrate that applicable water quality based effluent limitations and receiving water limitations shall be achieved through implementation of other watershed control measures.	
Minimum Control Measures	The listing of the minimum control measures in the Fact Sheet (VI.B.) that can be modified through the WMP omits the Planning and Land Development Program, which is inconsistent with Part VI.C.3.b.iv.	County of Los Angeles	The tentative order has been revised to remove the Planning and Land Development Program from the list of minimum control measures that can be modified in a Watershed Management Program. However, Part VI.D.7.d.i. allows a Permittee that has adopted a local LID ordinance prior to the adoption of this Order, and which includes a retention requirement numerically equal to the 0.75-inch, 24-hour rain event or the 85 th percentile, 24-hour rain event, to submit documentation to the Regional Board that the requirements in the local ordinance will provide equal or greater reduction in storm water pollutant loading and volume as would have been obtained through strict conformance with Part VI.D.7.c.i. or Part VI.D.7.c.ii and, if applicable, Part VI.D.7.c.v.	Part VI.C.4.b.iv.(1)(a).
<i>Adaptive Management Process</i>				
Adaptive Management Process	Parts VI.C.6.a. and VI.C.6.b. requires Permittees to base their adaptive management	County of Los Angeles	The tentative order has been revised to clarify that the adaptive management process should be based on a consideration of the listed factors in Part VI.C.7.a.i.(1)-(7). The requirements in Part VI.C.7.b have been	Part VI.C.7.a.i and Part VI.C.7.b.

	<p>process on several factors. Clarity should be added to indicate Permittees must consider the factors, but it is not a requirement to include all of them. Language proposed.</p>		<p>deleted. Permittees that elect to develop a WMP will conduct the adaptive management process on a watershed scale per Part IV.C.7.a, while Permittees that do not elect to develop a WMP will conduct an adaptive management process on a jurisdictional basis as required in response to exceedances of receiving water limitations in Part V.A. and through the Permittee’s annual reporting requirements in Attachment E – MRP.</p>	
<p>Adaptive Management Process</p>	<p>There are conflicting timelines in the Fact Sheet (Page F-44) and WMP section (Page 54) for implementing the iterative process to adapt the WMP to become more effective. While the Fact Sheet states the iterative process must be implemented at least twice during the permit term, the WMP section states it should be done on an annual basis starting in 2015. Consistent with the language used in the Fact Sheet, the iterative process should be implemented at least twice during the permit term.</p>	<p>County of Los Angeles</p>	<p>The tentative order and Fact Sheet have been revised to require Permittees to conduct the adaptive management process every two years from the date of WMP approval; however, reporting on permit implementation is required annually.</p>	<p>Part VI.C.7.a.i and Attachment F – Part VI.B.</p>

California Regional Water Quality Control Board, Los Angeles Region
Los Angeles County MS4 Permit
Response to Comments on the Tentative Order
MINIMUM CONTROL MEASURES MATRIX

Section/Topic	Comment Summary	Commenter(s)	Response	Change Made
<i>Storm Water Quality Management Program Implementation</i>				
Industrial/ Construction Pollutant Control Programs	Waterboards should be the lead regulators for industrial and construction sites with a general NPDES permit	City of Los Angeles, Inglewood, Hidden Hills, Ventura Countywide Stormwater Quality Management Program	The legal authority and rationale for the requirements imposed on permittees related to pollutant control from industrial facilities and construction sites is described in the Fact Sheet, Parts VI.C.1.a, VI.C.5 and VI.C.7. In sum, federal regulations at 40 CFR section 122.26(d)(2)(iv)(A) and 40 CFR 122.26(d)(2)(iv)(C) require that MS4 permittees implement a program to monitor and control pollutants in discharges to the MS4 from industrial and commercial facilities that contribute pollutant loads to the MS4. Federal regulations at 40 CFR section 122.26(d)(2)(iv)(D) require a description of a program to implement and maintain structural and non-structural BMPs to reduce pollutants in storm water runoff from construction sites to the MS4. Further, the issue of responsibility for oversight of these facilities/sites has been previously litigated and settled. Both the Los Angeles County Superior Court and the California Court of Appeal have specifically rejected arguments that the State and Regional Water Boards improperly delegated to permittees its inspection duties and that permittees were being required to conduct inspections for facilities covered by other state-issued general NPDES permits. The courts noted that obligations under state-issued permits were separate and distinct, and that there was no duplication of efforts and no shifting of inspection responsibility in derogation of the Regional Board's responsibility. <i>In re L.A. Cnty. Mun. Storm Water Permit Litig.</i> (L.A. Super. Ct., No. BS 080548, Mar. 24, 2005), Statement of Decision from Phase II Trial on	None

			<p>Petitions for Writ of Mandate, pp. at 17-18 [“[r]equiring permittees to inspect commercial and industrial facilities and construction sites is authorized under the Clean Water Act, and both the Regional Board and the municipal permittees or the local government entities have concurrent roles in enforcing the industrial, construction and municipal permits. The Court finds that the Regional Board did not shift its inspection responsibilities to Petitioners”]; <i>City of Rancho Cucamonga v. Regional Water Quality Control Board- Santa Ana Region</i> (2006) 135 Cal.App.4th 1377, 1389-1390.)</p> <p>It is also noteworthy that in the ROWD application for the 2001 LA County MS4 Permit, inspections of construction sites by MS4 permittees were recommended by the Principal Permittee.</p>	
Customization of MCMs	The Permit should ultimately establish criteria that will be used to support any customization of MCMs.	LA Permit Group	The Order specifies that at a minimum, Permittees’ programs shall be consistent with 40 CFR section 122.26(d)(2)(iv)(A)-(D). In response to comments that the Order is overly prescriptive, specifying criteria could restrict customization within these categories of minimum control measures. The criterion to allow customization is based on showing equivalent effectiveness, for example, a municipality who has identified a group of facilities within their jurisdiction as the largest source of pollutants could be allowed to focus their inspection efforts on controlling the pollutants from this subset of facilities.	None
Time frame for MCM implementation	The LARWQCB should develop a timeline for implementation and phasing in of the Minimum Control Measures requirements. A 12 month time schedule is recommended in order to transition from the current efforts to the new MCM requirements.	Inglewood, Monterey Park, Peninsula Cities, Pomona, South Bay Cities, Temple City, Torrance, Vernon	For permittees that do not elect to develop Watershed Management Programs, the Board has extended the time period to commence implementation of new or enhanced measures in Part VI.D. from 30 days after the effective date of the permit to six months. For permittees that elect to develop Watershed Management Programs, between 12-18 months provided to submit a draft WMP; permittees must begin implementation of new, enhanced and	Revisions to time frames.

			customized programs identified in a WMP upon approval of the WMP. In both cases, permittees must continue to implement their existing storm water management programs, including programs in all six minimum control measure categories.	
Industrial and Construction Control Programs	The Permit requires the permittees to conduct additional enforcement action prior to referral to Regional Board. The Bureau recommends that violations of the Industrial and Construction General Permits can be immediate and there should not have to be inspected and sited by the permittees prior to the referral. Again these facilities are under the purview of the State. This Permit can be used as an opportunity to streamline the oversight of these facilities and improve the efficiency of both municipal and State inspection units.	LA Permit Group, La Verne, City of Los Angeles	The legal authority and rationale for the requirements imposed on permittees related to pollutant control from industrial facilities and construction sites is described in the Fact Sheet, Parts VI.C.1.a, VI.C.5 and VI.C.7. Federal regulations at 40 CFR section 122.26(d)(2)(iv)(A) and 40 CFR 122.26(d)(2)(iv)(C) require that MS4 permittees implement a program to monitor and control pollutants in discharges to the MS4 from industrial and commercial facilities that contribute pollutant loads to the MS4. The regulations require that permittees establish priorities and procedures for inspection of industrial facilities and commercial establishments. Federal regulations at 40 CFR section 122.26(d)(2)(iv)(D) require a description of a program to implement and maintain structural and non-structural BMPs to reduce pollutants in storm water runoff from construction sites to the MS4. It is noteworthy that in the ROWD application for the 2001 LA County MS4 Permit, inspections of construction sites by MS4 permittees were recommended by the Principal Permittee. The Permit does have a different system of tiering for sites covered under a State General NPDES Permit. For sites permitted under a statewide general permit, a permittee can refer sites to the Regional Board after one inspection and one written notice. For sites not regulated by a statewide NPDES permit, the threshold is two inspections and two written notices.	None
General	Generally, MCMs should not be detailed in the tentative order. Instead, specific BMPs and other information should be placed in the Stormwater Quality	Baldwin Park, Carson, Covina, Duarte, Lawndale, Pico Rivera, San Gabriel, West	The current Storm Water Quality Management Plan or Model Program maintained by LA County is nearly identical to the current LA County MS4 Permit and many sections of it just make reference to the current Permit. Since there is no longer a Principal Permittee,	None.

	Management Plan (SQMP), which is the case under the current MS4 permit.	Covina	which is responsible for the current SWMP, it is best to make the Permit a stand-alone mechanism for compliance. The addition of Watershed Management Programs allows greater flexibility and customization of Permit provisions to protect water quality and would be similar in a number of ways to the current SWMP.	
Progressive Enforcement and Interagency Coordination	Section VI.D.2.a.iii: This condition does not state a retention policy for records, just that a permittee shall retain records. How long does the Regional Board intend for a permittee to retain such records to comply with this requirement? Please clarify if there is a certain timeframe or if it just needs to be consistent with permittees' existing policies. Permittees have formal records retention policies and must be put on notice to modify those policies if necessary to comply with the Permit.	Malibu; Santa Clarita	The permit includes standard provisions in Attachment D. Provisions related to records retention are found in Part III of Attachment D. Permittees are required to retain records for a period of at least three years. So long as permittees' existing records retention policies are consistent or exceed this requirement, it is not the Board's intention to require permittees to alter their records retention policies.	Language revised for clarity.

Documentation and Reporting	The minimum control measures overall will require an inordinate amount of tracking and documentation, much of which may not lead to a demonstration that water quality is being protected. While an electronic system is ideal, it is not always available to a permittee, is a costly endeavor and should be an optional method of maintaining records, not mandatory.	Malibu	An electronic format may take many forms from a very simple spreadsheet, to a relational database, to a geographical information system (GIS). A permittee may select the type of electronic format based on its availability to the permittee.	None
Contractor Certification	Please allow for contractors to self-certify if they are under contract obligation to understand all these requirements. It's an additional cost to the City to have to pay a contractor to sit in a class to learn something they are already under contract to understand.	Santa Clarita	The permit has been revised to allow contractors to self-certify as long as the certification includes all applicable training required in the permit, and the contractor provides documentation that they have received the requisite training.	Revisions made to MCMs where applicable
Enforcement	What are formal enforcement and formal records? How is this different from progressive enforcement?	Santa Clarita	Formal enforcement and formal records refer to written enforcement actions.	None
General	Please remove the cause or contribute language from inventory language to allow for dealing with overall implementation	Santa Clarita	The provision cited by the commenter is a statement of the goal of the existing development retrofitting inventory. Further, a main objective of the permit as a whole is to ensure that discharges from the MS4 do not cause or contribute to exceedances of Receiving Water Limitations. Therefore, the Board finds this language appropriate.	None
General	Please remove the partnering information. It is unclear who the partners are and what the requirement is. Also, please clarify what "verifiably implement" means. Is this beyond	Santa Clarita	The intent of the inclusion of the partnering language is to have Permittees establish a relationship with entities who they feel could facilitate compliance with the Permit. The "partners" could be different depending on a municipality's needs. Information included in the Annual Report is a verification of implementation.	None

	what is in annual report?			
<i>Development Construction Program</i>				
General Construction Permit	Much of the proposed Permit language is taken from the General Construction Permit. However as a way of reducing the length of the text and prevent conflicting requirements please consider referring to the GCP and its SWPPP requirements.	City of Los Angeles	The permit has been written to be a complete document and as such, to contain all the requirements within the body of the document. The Board has resolved all conflicting requirements between the Tentative Order and the General Construction Permits noted by commenters.	None
General Construction Permit sites are under the purview of the State.	All these provisions refer to the construction sites than are greater than one acre. As such these sites are subject to the General Construction Permit provisions and within the authority of the State agencies. Towards ensuring compliance with these regulations, the State is collecting a significant fee that covers inspection and tracking of these facilities. We are disputing the need to establish an unnecessary parallel enforcement scheme for these sites. Please consider maintaining these sites under State purview.	Downey, LA Permit Group, City of Los Angeles, Monterey Park, Pomona	The legal authority and rationale for the requirements imposed on permittees related to pollutant control from construction sites is described in detail in the Fact Sheet, Parts VI.C.1.a and VI.C.7. Federal regulations at 40 CFR section 122.26(d)(2)(iv)(D) require a description of a program to implement and maintain structural and non-structural BMPs to reduce pollutants in storm water runoff from construction sites to the MS4. It is also noteworthy that in the ROWD application for the 2001 LA County MS4 Permit, inspections of construction sites by permittees were recommended by the Principal Permittee.	None
Checklist	Part VI.D.7.h.ii(9) requires permittees to develop and implement a checklist to be used to conduct and document review of each ESCP or SWPPP within thirty (30) days of the Permit's adoption. Currently there is no accepted standardized SWPPP review checklist for the State Construction General Permit. The burden of	Hidden Hills, Pomona	The legal authority and rationale for the requirements imposed on permittees related to pollutant control from construction sites is described in the Fact Sheet, Parts VI.C.1.a and VI.C.7. Federal regulations at 40 CFR section 122.26(d)(2)(iv)(D) require a description of a program to implement and maintain structural and non-structural BMPs to reduce pollutants in storm water runoff from construction sites to the MS4. It is also noteworthy that in the ROWD application for the 2001 LA County MS4 Permit, inspections of construction sites by permittees were recommended by the Principal	None

	developing such a checklist falls solely to the permittees. In addition, the City will be required to allocate already limited resources to perform the mandatory construction site inspections, which represent a two hundred percent (200%) increase in the number of inspections required for sites greater than one (1) acre.		<p>Permittee.</p> <p>The ESCP is a document only required under the MS4 permit and the Permittees can opt to use the State SWPPP in its place. Since this is a discrete MS4 checklist, it should be developed by MS4 Permittees.</p>	
Erosion and Sediment Control Plan	The term Erosion and Sediment Control Plan is introduced in the Permit. There is no need to introduce a new document for construction sites that are subject to GCP’s SWPPP requirements.	LA Permit Group, City of Los Angeles	A Permittee may choose to require an Erosion and Sediment Control Plan for sites less than an acre. In that case, the term provides distinction from a State SWPPP. In addition, for sites 1 acre and greater, though Permittees can use the State SWPPP to satisfy MS4 requirements, they can also require their own discrete document, which is easily distinguished from the State SWPPP using the term Erosion and Sediment Control Plan.	None
Table 12 Minimum BMPs	The draft Permit requires an effective combination of erosion and sediment control BMPs from Table 12. However, the title of the table, “Minimum Set of BMPs for All Construction Sites” implies that all the listed BMPs would be required on all construction sites. Not all of those BMPs such as a silt fence are applicable for all construction sites disturbing less than one acre of soil. Please consider replacing the title of the Table 12 to “Applicable Set of BMPs for Construction Sites”	County of Los Angeles; City of Los Angeles, Malibu	Table 12 serves as the “minimum BMPs” for all construction sites. As noted in your comment, Permittees are required to implement an effective combination of BMPs from Table 12 for sites less than an acre. For clarity the Board has revised the table title.	Table 12 relabeled to read, “Applicable Set of BMPs for Construction Sites”
General	It is unclear what “activities that require a permit” means. Does	County of Los Angeles	The language in the Tentative Order reads: “Each Permittee shall use an electronic system to	None

	this refer to Building and Grading Permits issued by the Permittee or is the database required to track permits issued by outside agencies, such as California Department of Fish and Game, RWQCB, etc.		inventory grading permits, encroachment permits, demolition permits, building permits, or construction permits (and any other municipal authorization to move soil and/ or construct or destruct that involves land disturbance) issued by the Permittee.” The language is specific in defining the permits, <i>issued by the permittee</i> , that are required to be inventoried.	
General	Please remove the requirement for permittees to verify Fish and Game permits and other permits issued by state agencies. This is only appropriate for planning approvals or grading permits, not building permits.	Santa Clarita	While verification to ensure other state or federal permits is recommended, the requirement to verify that permits have been obtained from DFG and ACOE is not directly tied into implementation of the Tentative Order.	Revisions made, deleting references to permits issued by DFG and ACOE.
Section VI.D.7.g.ii.5 Construction Site Inventory / Electronic Tracking System	The Permit requires that: “[e]ach Permittee shall complete an inventory and continuously update as new sites are permitted and sites are completed,” and it specifies that the current construction phase shall be included in the tracking database. It is unrealistic to require permittees to continuously update and be completely current, given the uncertain nature of construction schedules, delays in construction due to financing and other problems, etc. At best, a permittee may only be able to say a project is active or closed. Please either delete VI.D.7.g.ii.5 or revise it to say “where feasible.”	Malibu	The Board agrees that continuous tracking of all phases of construction projects can be challenging given the uncertainty in construction schedules. The order has been revised to indicate that the phase of construction should be included where feasible.	Section VI.D.7.g.ii.5 was revised to read “where feasible” for the current stage of construction.
Section VI.D.7.h.ii.5 Construction Plan Review	Requiring a Qualified SWPPP Developer (QSD) to prepare an ESCP is excessive, especially if the project is less than one acre.	Malibu	An ESCP is not required for sites under one acre.	None

and Approval Procedures on Pg. 86	The City suggests removing the requirement of a QSD to develop an ESCP.			
Development Construction Program	It is unclear if specific BMPs listed in Table 14 are intended to be minimum requirements of if they are suggested options. It is not always applicable to use these BMPs in concert with each other.	County of Los Angeles	The Order reads: <i>Permittees are encouraged to adopt respective BMPs from latest versions of either the California BMP Handbook, Construction, or Caltrans Stormwater Quality Handbooks, Construction Site Best Management Practices (BMPs) Manual and addenda. Alternatively, Permittees are authorized to develop or adopt equivalent BMP standards consistent for Southern California and for the range of activities presented below in Tables 13 through 16.</i> BMPs listed in the Table are examples of specific BMPs for various activities. Permittees can use these or other equivalent BMPs per the Order language.	None
Inspection Frequencies	The inspection frequencies identified in Table 17 are in direct contradiction to the Construction General Permit (2009-0009-DWQ).	County of Los Angeles	The Board has reviewed the inspection frequencies from earlier working proposals to make them consistent with those in the Construction General Permit (2009-0009-DWQ).	None
Request for threshold	Consider introducing a minimum threshold for construction sites such as those for grading permits. As proposed, minor repair works or trivial projects will be considered construction projects and will unnecessarily be subject to these provisions.	LA Permit Group, Torrance, South Bay Cities	For sites less than an acre, the Permit requires require the implementation of an effective combination of erosion and sediment control BMPs from Table 12 to prevent erosion and sediment loss, and the discharge of construction wastes. If a project is trivial, the required BMP implementation will be minimal.	None
MEP	In the Development Construction section of the Permit, MEP should be changed to BAT and BCT for consistency with the State's General Construction Permit (GCASP).	LA Permit Group	Permits for storm water discharges associated with construction activity are subject to a different technology based standard than MS4 permits. The standard for MS4 permits is MEP not BAT/BCT, which is the standard for the General Construction Permit. Section 301(b)(1)(A) of the CWA and 40 CFR section 122.44(a) require that NPDES permits include technology based effluent limitations. In 1987, the	None

			<p>CWA was amended to require that municipal storm water discharges “reduce the discharge of pollutants to the maximum extent practicable.” (CWA § 402(p)(3)(B)(iii).) The “maximum extent practicable” (MEP) standard is the applicable federal technology based standard that MS4 owners and operators must attain to comply with their NPDES permits. Thus, to comply with CWA sections 301 and 402 for MS4 discharges, MS4 permits must, at a minimum, include effluent limitations to meet the technology-based MEP standards. A technology based effluent limitation is based on the capability of a model treatment method to reduce a pollutant to a certain concentration (NPDES Permit Writer’s Manual, Appendix A). T states</p>	
VI.D.7.j.ii.2.a Development Construction Program	<p>Consider deleting this requirement as being unnecessary. The placement of BMPs may not be needed based on the season of construction and the planned construction phases. A better requirement would be to inspect sites at the beginning of the rain season such as the months of September and October.</p>	County of Los Angeles	<p>The Order does not require “placement” of BMPs prior to construction. The pre-construction inspection is to ensure that BMPs are <u>available</u> prior to land disturbance activities. Inspections are necessary throughout all stages of construction and during both wet and dry weather to protect water quality.</p>	None
State permits	<p>Under Section D.7.h.ii.(8), the verification that contractors have obtained various State permits (401, 404, 1600, etc.) should not be the responsibility of the City. As owner/operator of the flood control channels where the actual connections will be made, verification of these permits should be the responsibility the Army Corps of Engineers or the County Flood Control District.</p>	Downey, Monterey Park, Temple City	<p>This requirement is appropriately placed on the permittees, as they have ultimate authority and responsibility to prohibit, prevent, or otherwise control the discharges that enter and exit the portions of the MS4 for which they are owners and/or operators. This includes ensuring that, prior to issuing a grading or building permit, the construction site operators have the requisite permits s that discharge that reach receiving waters are regulated and/or monitored.</p> <p>While verification to ensure other state or federal permits have been obtained is recommended, the</p>	Revisions made.

			requirement to verify that permits from the DFG and ACOE have been obtained have been removed.	
Fire protection	Section VI. D.7.f (page 84): land clearing for fire protection should not be considered a construction activity.	Downey, Monterey Park, Peninsula Cities, Temple City	The Board finds it is possible to comply with land clearing for fire protection without triggering land disturbance thresholds. However, if land clearing for fire protection is being conducted such that sediment generation is an issue, appropriate measures should be in place to prevent the discharge of sediment to the MS4.	None
Erosion and Sediment Control Plan	The Permit will require projects of one (1) acre or greater to prepare an Erosion and Sediment Control Plan ("ESCP"). It is our understanding that the ESCP must include the same elements of a Stormwater Pollution Prevention Plan ("SWPPP").	Hidden Hills	This provision was written with the intent to have Permittees avoid approving the State SWPPP if they choose not to. An ESCP while similar to the State SWPPP does not have to be the same document and as such is a requirement unique to the MS4 Permittees.	None
Section VI.D.7.j.ii.2 Construction Site Inspection on Pg. 90	The Permit requires that permittees "inspect all phases of construction." Please clarify that this condition applies only to sites greater than or equal to one acre, perhaps by renaming the section to Construction Site Inspection for Sites Equal to or Greater than One Acre or a similar title.	Malibu	The Board agrees and will relabel the table on page 90 as inspection frequencies for sites 1 acre and greater.	Language revised.
Section VI.D.7 e-j Construction Site Requirements	Despite <i>C. Applicability</i> stating, "[t]he provisions contained in Part VI.D.7.d below apply exclusively to construction sites less than 1 acre. Provisions contained in Part VI.D.7.e – j, apply exclusively to construction sites 1 acre or greater," it is not clear in each individual condition, e through j, that this threshold applies. Please add language to these conditions that is more	Malibu	The Order specifies a size threshold for requirements based on project size. The tables are organized and clearly specify which conditions apply based on project size	None

	explicit in clarifying that it only applies to sites greater than one acre.			
	Need to exclude landscaping and gardening activities from the definition of construction. Because there is no size limit for construction sites in the draft permit and based on the description of construction activity in Part VI.D.7.f, a homeowner who is gardening or conducting landscape activities that do not require a building permit would be subject to the provisions of VI.D.7.	Peninsula Cities	For sites less than 1 acre appropriate implementation of sediment and erosion BMPs to prevent the discharge of sediment to the MS4 is the requirement. Typically, gardening and landscaping activities do not pose a threat and would not require any attention. If landscaping or gardening is being conducted where it poses a sediment and erosion threat BMPs should be in place to prevent sediment from being discharged.	None
General	The narrative in VI.D.7.f should be moved to the Applicability section at VI.D.7.c so that the applicability subsection actually discusses what types of activity constitute construction and are subject to the provisions of VI.D.7.	Peninsula Cities, Torrance	The Board agrees. The language has been revised to include the activities to which the Development Construction Program requirements apply in Part VI.D.8.c. "Applicability".	Revisions made.

<p>Document Retention</p>	<p>The requirement for Permittees to create an electronic tracking system for construction sites one acre and greater is redundant with the State Water Resources Control Board SMARTS tracking system under the General Construction permit. It is a waste of public funds to create a redundant database requirement, especially for largely built-out communities where very few construction projects are large enough to trigger this requirement—since the Permittees are already required by Part VI.D.7. h.(8) to ensure that coverage is obtained under the General Construction Permit so all such projects would be required to upload their information to the SMARTS system and that information is also readily accessible to Regional Board staff as well.</p> <p>Provide the option for permittees to meet this requirement by regularly accessing and using the Statewide SMARTS system to monitor the status of construction sites within their jurisdictions.</p>	<p>Peninsula Cities, South Bay Cities, Torrance</p>	<p>The Tentative Order states, <u>“Each Permittee shall use an electronic system to inventory grading permits, encroachment permits, demolition permits, building permits, or construction permits (and any other municipal authorization to move soil and/ or construct or destruct that involves land disturbance) issued by the Permittee.”</u></p> <p>For construction sites over an acre, The Board finds that it is appropriate to “use” the SMARTS system.</p>	<p>None</p>
<p>Erosion and sediment control ordinance</p>	<p>Each Permittee shall establish for its jurisdiction an enforceable erosion and sediment control ordinance for all construction sites that disturb soil.</p>	<p>Vernon</p>	<p>The control of sediment from a construction site is a core requirement of the Statewide General Construction Permit and of the current and past LA County MS4 Permits. Overall objectives of the permit include controlling MS4 discharges so they do not cause or contribute to exceedances of water quality</p>	<p>None</p>

	Concern- The receiving water for the City of Vernon is not impacted by, nor has a TMDL listed for sediment. This appears to be a superfluous provision for Permittees not impacted by sediment in their respective receiving water.		standards that have been established to protect beneficial uses and prevent degradation of water quality. Therefore it is important to control discharges to both remedy water quality impairments as well as protect against future water quality impairments. Further, sediment is both a pollutant in and of itself that must be controlled and a substance to which other pollutants adsorb – making it a vehicle by which other pollutants are transported to receiving waters. The development of an ordinance facilitating the control of sediment is crucial to achieving the control of sediment and other pollutants that adsorb to sediment to the MS4.	
ESCPs	The provision in Part VI.D.7.h.ii to review and approve ESCPs is clearly an attempt to relinquish SWPPP review and approval responsibility from the LARWQCB staff to the Permittees without allocating any funds collected through the State General Construction Permit to support the requirement. What is even more troubling is that the LARWQCB would like it to be a permit violation if we are unable to find the resources to implement this provision. This is obvious abuse of permitting authority.	Vernon	<p>The ESCP is the planning document that ensures project proponents have considered potential water quality impacts from the site’s construction activities and have identified the non-structural and structural BMPs that will be implemented to prevent any impacts to water quality. MS4 permittees must have the legal authority to control discharges from construction sites to the MS4. The Board, in response to Permittees’ comments, has allowed a State SWPPP to substitute for an ESCP, in order to reduce paperwork.</p> <p>The commenter provides no factual or legal support for its assertion that this requirement is an abuse of permitting authority.</p>	None
Public Agency Activities Program				
Retrofit of catch basins in non-TMDL areas.	It is unreasonable to prescribe the installation of CB curb opening screens on catch basins that are located within a watershed that has not been identified as being impaired for trash. This requirement should be removed	Inglewood, LA Permit Group, La Verne, Malibu, City of Los Angeles, Norwalk, Pomona	The intent of the Permit is to implement appropriate trash control consistent with the MEP standard and to control MS4 discharges such that they do not cause or contribute to exceedances of water quality standards. Therefore it is important to control discharges to both remedy water quality impairments as well as protect against future water quality impairments.	None

	since if an impairment is identified it would be address through a TMDL.		The Order allows Permittees to implement alternative or enhanced BMPs (“such as but not limited to increased street sweeping, adding trash cans near trash generation sites, prompt enforcement of trash accumulation, increased trash collection on public property, increased litter prevention messages or trash nets within the MS4”) that provide substantially equivalent removal of trash in lieu of installation of trash excluders in areas identified as Priority A.	
Erosion and sediment control BMP’s	The Order states that for Permittee-owned projects that disturb less than one acre of soil, implement an effective combination of erosion and sediment control BMP’s from Table 13 on page 87. It is not clear that these requirements do not apply to maintenance work.	County of Los Angeles	If maintenance work being conducted presents a serious risk for discharge of sediment to the MS4 it is appropriate that effective BMPs are implemented to prevent the discharge of sediment to the MS4.	None
Public Facility Inventorying and Retrofitting Inventorying	Because the Order does not specify an implementation timeframe for such requirements as Public Facility Inventorying and Retrofitting Inventorying it is assumed that these provisions be implemented 30 days after the effective date of the Order.	Downey, Hidden Hills, County of Los Angeles	The Board agrees and will provide timeframes for all new Permit requirements where an implementation timeframe is not already specified. The Board has lengthened the timeframe to begin implementation of new and enhanced minimum control measures from 30 days after the effective date to six months after the order effective date. Between the order effective date and the deadline for beginning to implement new and enhanced minimum control measures, Permittees are required to continue to implement their existing minimum control measures as specified in Order No. 01-182 and their Storm Water Management Programs.	Revisions made.
Pesticides or fertilizers	The Permit states that no application of pesticides or fertilizers should occur (1) when two or more consecutive days with greater than 50% chance of rainfall are predicted by NOAA, (2) within 48 hours of a ½-inch	County of Los Angeles	The Board agrees for certain types of pesticides the Order requirement is not applicable.	Revisions made.

	rain event, or (3) when water is flowing off the area where the application is to occur. This requirement does not apply to the application of aquatic pesticides. There are some herbicides, such as pre-emergent herbicides, that require rainfall for activation. The Permit needs to allow flexibility for application of such types of pesticides or herbicides.			
Clean out	<p>The Permit requires that catch basins, trash receptacles, and grounds in the event area be cleaned out within 24 hours subsequent to the event. Many of these events occur during the weekend when crews are not available.</p> <p><u>Recommendation</u> Revise to: “Provide clean out of catch basins, trash receptacles, and grounds in the event area within 24 hours <u>one business day</u> subsequent to the event.</p>	County of Los Angeles	The Board agrees; while the cleanup of the grounds should happen as soon as possible after a public event, the cleanout of catch basins and receptacles could be problematic during the weekend. The permit has been revised as suggested.	Revision made.
Trash excluders	The Permit requires trash excluders or equivalent devices be installed on catch basins in areas that are not subject to trash TMDL’s within two years of adoption of this Order. The two year time period is not feasible.	County of Los Angeles	The implementation timeframe has been changed to within four years of the effective date of the order.	Revision made.
Stockpile	The Permit requires various BMPs be implemented for Road Reconstruction work, including (11) Avoid stockpiling soil, sand, sediment, asphalt material and	County of Los Angeles	The Order reads “avoid stockpiling <i>in or near MS4 or receiving waters.</i> ” It does not prohibit it. Stockpiles should be protected with a cover or sediment barriers when rain is predicted to prevent discharge to the MS4 and receiving waters.	None

	<p>asphalt grinding materials or rubble in or near MS4 or receiving waters. (12) Protect Stockpiles must be protected with a cover or sediment barriers during a rain.</p> <p>For roads in mountainous areas, it is essential that we have the ability to stockpile native materials removed from the roads in selected areas adjacent to the roads for future maintenance needs. It is not practical to haul away these materials and purchase similar materials for later use.</p>			
<p>Parking lots</p>	<p>This requirement specifies the use of street sweeping equipment for maintaining parking facilities clean. This language is too prescriptive. Permittees should be allowed to select the means and methods to maintain their parking lots.</p> <p>Recommendation Revise to read: “Permittee-owned parking lots exposed to storm water shall be kept clear of debris and excessive oil buildup and cleaned using street sweeping equipment no less than 2 times per month...”</p>	<p>County of Los Angeles</p>	<p>The Board agrees; the permit has been revised as suggested.</p>	<p>Revision made.</p>
<p>Minor repairs</p>	<p>Minor repairs may require more than one day to complete. It may take several days to assess the damages, gather materials and</p>	<p>County of Los Angeles</p>	<p>The Board agrees; the permit has been revised as suggested to allow a self-waiver of the provisions of this order for repairs of essential public service systems and infrastructure in emergency situations that can be</p>	<p>Revision made.</p>

	supplies, conduct the repair work, and clean-up the site.		completed within 3 days, rather than in one day.	
Training requirements	This provision requires training of employees and contractors no later than 1 year after Order adoption and annually thereafter before June 30. The language is not consistent with that under the Illicit Connections/Illicit Discharges Elimination Program, that provides Permittees the flexibility to provide the training themselves or include contractual requirements for training (VI.D.9.f.ii.).	County of Los Angeles, Peninsula Cities, South Bay Cities, Torrance, Ventura Countywide Stormwater Quality Management Program	The Board agrees; the training requirements in the public agency activities section have been revised to be consistent with the other sections in the Order.	Revisions made.
Retrofit provisions	We recommend that for this Permit term that the retrofit provision (i.e. inventory, screening, and prioritization) be limited to public right of ways lands only.	LA Permit Group, La Verne, Ventura Countywide Stormwater Quality Management Program	The Permit requires that retrofit opportunities shall be identified within the public right-of-way or in coordination with a TMDL implementation plan(s). The goals of the existing development retrofitting inventory are to address the impacts of existing development through regional or sub-regional retrofit projects that reduce the discharges of storm water pollutants into the MS4 and prevent discharges from the MS4 from causing or contributing to a violation of water quality standards as defined in Part V.A, Receiving Water Limitations.	None

Storm water management facilities	The Permit states that each Permittee shall maintain an updated inventory of all Permittee- owned or operated facilities within its jurisdiction that are potential sources of storm water pollution, including storm water management facilities (e.g., detention basins). We do not agree that our stormwater management facilities themselves are potential sources of stormwater pollution. In addition, there are requirements under the Monitoring and Reporting Program to map open channels and underground pipes.	LACFCD	Improperly maintained, facilities such as vehicle storage and maintenance yards can be potential sources of pollutants. A separate section within Part VI.D. has been added to the permit identifying the minimum control measures and specific provisions within each minimum control measure category that are applicable to the LACFCD.	None
Public Agency Activities	Recommend you reference CASQA BMP Handbook Municipal for list of BMPs that should be employed by Public Agencies	Torrance	This was originally proposed as it is in the Ventura County MS4 Permit and was objected to by multiple Permittees because they wanted to ensure that they retained the flexibility to use their own BMP manuals. Permittees could still choose to use the CASQA Manual for BMP implementation and be compliant if BMPs are implemented per the manual for all pollutant generating activities.	None
Public Agency Activities	Omit sections VI.D.8.e. ii and VI.D.8.h.x.(3)(d).	Torrance	The provision in VI.D.8.e.ii is consistent with 40 CFR section 122.26(d)(2)(iv). The Board sees no merit in deleting subsection h.x(3)(d), regarding treatment of residual water from treatment BMPs.	None
Debris basin maintenance	Maintenance of debris basins is already regulated under separate permits including the California Regional Water Quality Control Board's Water Quality Certification for Proposed County Debris Basin Maintenance Project (159 Basins) (Corps' File No. 94-	LACFCD	The Board agrees and will remove language referring to debris basin maintenance in VI.D.9.h.viii (1) & (2).	Revisions made.

	<p>01558-CSC), Los Angeles County (File No. 02-144-2008 Renewal), State Water Resources Control Board Order No. 2003-0017-DWQ General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification, US Army Corps of Engineers, Los Angeles District Regional General Permit SPL-2003-00411-KW, and the Department of Fish and Game Final Lake or Streambed Alteration Agreement Notification No. 1600-2008-0290-R5. The Water Quality Certification specifically authorizes sediment removal only under three conditions, based on the condition of the watershed or other special circumstances.</p>			
<p>VI.D.8.h.ii Public Agency Activities Program</p>	<p>The process by which the material removed from MS4 should not be allowed to reenter the MS4 is unnecessarily prescriptive. Additional option that the two listed for disposing liquid material exists and permittees should be these options. Consider including only the first sentence of this subsection.</p>	<p>City of Los Angeles</p>	<p>Cleanout from storm drains may contain high levels of pollutants due to runoff and spills. If cleanout handling facilities are insufficient, pollutants from stockpiles, storage, or treatment units may drain to nearby receiving waters. The Regional Water Board is obligated to ensure that Public Agency requirements do not result in a transfer or reintroduction of pollutants, as this undermines the purpose of controlling pollutant discharges to the receiving water. The options for disposal of storm drain cleanout are non-specific and are intended to protect the receiving waters.</p>	<p>None</p>
<p>VI.D.8.i.iv.1 Public Agency Activities Program</p>	<p>The requirement to clean a parking lot, once a month, even if inspection indicates no presence of debris or oil buildup, is unnecessary.</p>	<p>City of Los Angeles</p>	<p>Pollutants, present in fine particles, are generally not visible in parking lots. Based on information citing sweeping cycles and the sweeping effectiveness of cities such as Dana Point, CA, San Jose, CA and studies prepared for the Center of Watershed Protection</p>	<p>None</p>

			and North Saint Paul, MN demonstrate the effectiveness of sweeping at no less than monthly intervals. Additionally, computer modeling conducted in the Pacific Northwest indicates that a frequency of once every week or every two weeks is optimum for pollutant removal. (Stormwater Treatment Northwest. Vol. 4, No. 4 November 1998. Co-editors Gary R. Minton, RPA, Bill Lief, Snohomish County SWM, Roger Sutherland, Pacific Water Resources.) The required frequency for cleaning of parking lots is appropriate. The permit states that this requirement only applies to parking lots exposed to storm water (i.e., uncovered lots).	
Sanitary Sewer	The entire section ix (page 103) dealing with sanitary sewers should be omitted. Sanitary sewer system operations and maintenance are already addressed by an existing WDR .	Downey, Monterey Park, Torrance	Infiltration from sanitary sewers to the MS4 is a serious concern. This requirement is consistent with requirements for a storm water management program identified in 40 CFR section 122.26(d)(2)(B)(7). The section correctly acknowledges sanitary sewer operations may already be addressed by a WDR.	None
Sanitary Sewer Systems	For municipalities to “provide for diversion of the entire flow to the sanitary sewer or provide treatment” with respect to an ongoing illicit discharge is not the appropriate language and implies that the MS4 permittee should bear the cost and responsibility for complying with this requirement which responsibility is properly borne by the discharger Substitute “require the discharger to obtain an NPDES permit or connect the non-storm water discharge to the sanitary sewer system”	Peninsula Cities	Illicit discharges are prohibited under the Order. Once they are identified, Permittees have a responsibility to abate these discharges which could mean directing them to apply for an NPDES Permit or directing them to divert their discharge to a sanitary sewer system. The language provides Permittees with multiple options for addressing illicit discharges and is appropriate as written.	None
Section	This section details signage	Malibu	The Tentative states:	None

<p>VI.D.8.h.vi.4 Catch Basin Labels and Open Channel Signage</p>	<p>requirements for drainage facilities. This requirement must be revised to explain that it only applies to facilities owned or operated by the Permittee.</p>		<p><i>Each Permittee shall label all storm drain inlets that they own with a legible “no dumping” message. The Board finds that the provision that requires posting signs referencing local code(s) that prohibit littering and illegal dumping at designated public access points is adequately clear that it applies to permittees in whose jurisdictional area the public access point is located and the permittee with control over the access point.</i></p>	
<p>Section VI.D.8.d.iv.1 Inventory of Existing Development for Retrofitting Opportunities</p>	<p>The Permit states, “The Permittee’s storm water management program: Highly feasible projects expected to benefit water quality should be given a high priority to implement source control and treatment control BMPs in a Permittee’s SQMP.” However, SQMP is not defined and seems to not be used anywhere else in the draft permit. The City assumes that the Regional Board intended to write SWMP. Please correct and clarify.</p>	<p>Malibu</p>	<p>The commenter’s assumption is correct and the language will be revised.</p>	<p>Revision made.</p>
<p>Public Agency Activities</p>	<p>Water removed by dewatering from solid material removed from the MS4 (including street sweeping material) could be disposed by percolation rather than requiring that the water be disposed via sanitary sewer—this would be analogous to the provision in VI.D.8.h.x(3)(b) where residual water from BMP treatment control devices can be “applied to the land without runoff”.</p>	<p>Peninsula Cities, South Bay Cities</p>	<p>The request is reasonable and the language has been revised to include this alternative.</p>	<p>Revision made.</p>

	<p>Add a third disposal option to VI.D.8.h.ii as follows:</p> <p>(3) Applied to the land without runoff</p>			
Public Agency Activities	<p>The term “residual water” has a footnote number 35 stating that it is to be defined in Attachment A Definitions, however no definition of “residual water” is provided in Attachment A.</p> <p>Provide a definition of “residual water” in Attachment A.</p>	Peninsula Cities	Comment noted. A definition will be included in Attachment A for “residual water.”	Definition was added.
Public Agency Activities	<p>If there is now to be an effective requirement to prohibit public facility vehicle washing as a non-stormwater discharge without condition/pre-treatment and require existing facilities to retrofit, then municipalities must be given at least two years from the effective date of the permit to make this retrofit—30 days from the effective date of the permit is not a sufficient period of time. Also for small municipalities where the frequency of washing and amount of washwater can be reasonably managed by percolation into the ground, recommend providing a third option for preventing the discharge of wash waters from vehicle and equipment washing:</p> <p>(3) discharge the wash water onto a permeable surface where the wash water will percolate into the</p>	South Bay Cities, Ventura Countywide Stormwater Quality Management Program	<p>There is not a retrofit requirement, as the Order reads; <i>Each Permittee shall ensure that <u>any municipal facilities constructed, redeveloped, or replaced shall not discharge wastewater from vehicle and equipment wash areas to the MS4 by plumbing all areas to the sanitary sewer in accordance with applicable waste water provider regulations, or self-containing all waste water/ wash water and hauling to a point of legal disposal.</u></i></p> <p>The example of a small municipality where there is adequate space and limited vehicle washing to make percolation viable is a unique situation and should be addressed by the BMP substitution process as there is still potential concern regarding discharge to groundwater.</p>	None

	ground and that is bermed or sloped to prevent discharge to the MS4, e.g., gravel surface or porous paving.			
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Trash Requirements	Please clarify what is meant by "when outfall trash capture is provided, revision of the schedule is required"	Santa Clarita	The Board's intent in including the provision was to address clean out frequency revisions that may result if Permittees install a trash capture device such as the "connector pipe screen" on an outfall. A change in the frequency of clean-out may be warranted depending on the type of device installed in the catch basin.	None
Section VI.D.8.c Public Facility Inventory	<p>The Permit requires that "Each Permittee shall maintain an updated inventory of all Permittee-owned or operated (i.e., public) facilities within its jurisdiction that are potential sources of storm water pollution." There are many facilities owned by other agencies within the jurisdictional limits of another public agency (e.g., federal, state, county, school district, etc.), over which the permittee has no control over activities at the other agency's facility. Please include language that requires those agencies that are also permittees under this permit to provide this information to the City or jurisdictional lead where the facility is located. Additionally, please include language that would exempt facilities from the inventory requirement where the permittee city does not have authority over the agency and its facility and cannot require submittal of documentation.</p>	Malibu	This provision is related to Permittee owned or operated facilities. Other provisions of the permit require inventories or tracking of other non-Permittee owned or operated facilities that may be a source of pollutants within the Permittee's jurisdiction. Permittees must have the legal authority to control discharges of pollutants to their MS4s. Requirements to track activities and facilities that may discharge pollutants to the Permittee's MS4 are consistent with 40 CFR section 122.26(d)(2)(i) and (iv).	None
Public Information and Participation				
General	The Permit requires that a PIPP must be implemented "that	LACFCD	The Board recognizes the concern raised and has revised the Order.	Revision made.

	includes, but is not limited to, the requirements listed in this part.” (emphasis supplied.) This is problematic language, because it purports to state that a PIPP must include unspecified additional requirements that could be found wanting by the RWQCB or a court.			
VI.D.4.d.3 Public Outreach	Please consider removing pharmacies from the list. Improper disposal of drugs are already been in the focus of municipal wastewater and refuse collection programs. Instead consider including paint stores to the list.	City of Los Angeles, Santa Clarita, South Bay Cities, Torrance	Pharmaceuticals and personal care products (PPCPs) are an emergent water quality concern and should be targeted for public education. However, the Regional Board recognizes that there are several public information and participation programs already in place within Los Angeles County that are addressing this issue, including the “No Drugs Down the Drain” campaign sponsored by the Los Angeles County Department of Public Works and the Los Angeles County Sanitation Districts; the City of Los Angeles’ Household Hazardous Waste (HHW) collection program, including its S.A.F.E. permanent collection centers; and the LA County Sheriff’s Department and Departments of Public Works and Public Health “Safe Drug Drop-Off” Program. Therefore, the draft tentative order is revised to remove “Pharmacies” from the list of points of purchase for activity specific storm water pollution prevention materials. However, where PPCPs are identified as a priority water quality issue resulting from storm water and/or non-storm water discharges from the MS4 within a particular watershed management area, Permittees should closely coordinate with the agencies and departments sponsoring these existing programs, and expand these programs where necessary through the Permittees’ PIPP to address the issue. The permit is also revised to include paint stores.	Revisions made.
Industrial/Commercial Facilities Program				
Nurseries	The draft Permit now includes nurseries and nursery centers as a	County of Los Angeles	Nationwide and statewide research and monitoring data has shown that nurseries are also a category of facilities	None

	critical source to be tracked. There is no clear justification for including these types of commercial facilities.		that tend to release a higher quantity of pollutants in stormwater runoff. Recognizing this class of facilities and activities as a potential source of pollutants, the Regional Board adopted a <i>Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands within the Los Angeles Region (Waiver)</i> , Order No. R4-2005-0080. Because the non-agricultural nurseries present in the urban environment can manifest the same characteristics as their agricultural counterparts, the nurseries under specified NAICS codes are proposed to be covered under the Tentative Order. This is consistent with requirements adopted by this Board in the current Ventura County MS4 permit.	
Inventory	The draft Permit requires the inventory to have the ability to denote if the facility is known to maintain coverage under the State Water Board's General NPDES Permit for the Discharge of Stormwater Associated with Industrial Activities (Industrial General Permit) or other individual or general NPDES permits or any applicable waiver issued by the Regional or State Water Board pertaining to storm water discharges.	County of Los Angeles	The State Board SMARTS system can be accessed by the public and provides real time information of the status of General Industrial and General Construction Permittees.	None
SMARTs	The exclusion of sites inspected by the Regional Board” provision requires each Permittee to review the State Water Board's Storm Water Multiple Application and Report Tracking System (SMARTS) database at defined intervals to determine if an industrial facility has recently been inspected by the Regional Water Board. We have had much	County of Los Angeles	Regional Board staff enters all inspection data and reports into SMARTS on a real-time basis (2-3 days after supervisor approval). These reports are available to Permittees and the public. The SMARTS system allows sites to be queried by WDID number, street address and other metrics. Permittees are not restricted to querying by City name alone.	None

	difficulty in extracting a listing of facilities within the unincorporated County areas since many times, the listed jurisdiction is not correct (for example, the site is listed as being within a particular city, but is actually within an unincorporated County area).			
General	The County of LA requests that the Regional Water Board maintain a list of the facilities within the region according to their proper jurisdiction and make it available to the Permittees. Regional Water Board should also provide the Permittees with a quarterly listing of facilities they have inspected.	County of Los Angeles	Regional Board staff enters all inspection data and reports into SMARTS on a real-time basis (2-3 days after supervisor approval). The State Board SMARTS system can be accessed by the public and provides real time information of the status of General Industrial and General Construction Permittees.	None
Industrial/ Commercial Facilities	VI.D.5.e.ii.3 states: “The Permittees shall require implementation of additional BMPs where storm water from the MS4 discharges to an environmentally sensitive area, a water body subject to TMDL Provisions in Part VI.E, or a CWA § 303(d) listed impaired water body. Likewise, if the specified BMPs are not adequately protective of water quality standards, a Permittee may require additional site-specific controls.” This seems to be repetitive of VI.D.5.g., which deals directly with	Malibu	The Board agrees; the redundant provision will be removed	Revision made.

	<p>SEAs and states, “For critical sources that discharge to MS4s that discharge to SEAs, each Permittee shall require operators to implement additional pollutant-specific controls to reduce pollutants in storm water runoff that are causing or contributing to exceedances of water quality standards.” The City suggests deleting the repetitive language from VI.D.5.e.ii.3 and, instead, editing VI.D.5.g to be more inclusive.</p>			
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<p>Section VI.D.5.e.i.2 Exclusion of Facilities Previously Inspected by the Regional Water Board</p>	<p>The City supports this condition; however, if the State is collecting fees annually for the purposes of permitting these Industrial Facilities subject to the General permit, then the State should, at a minimum, inspect such facilities at least two times during the permit term. Alternatively, if the State is collecting inspection fees, then the municipal permittees should be allowed to recoup inspection costs from the State. Furthermore, it is imperative that the State promptly update the database to track its inspection of these facilities. This was not done during the term of the last permit for the one (now terminated) facility subject to the general permit within the City of Malibu. The City discovered that the State had indeed inspected, but only after the City conducted an inspection of the facility.</p>	<p>Malibu</p>	<p>The Regional Board’s inspection priority varies from year to year, and depending on this, certain facilities or sectors are prioritized for inspection as resources allow. The fees collected under the General Permit pay for the State inspections and State oversight of these General Industrial Permittees, which is a separate obligation from that of the municipalities MS4 obligations under federal law. Permittees also have the authority to levy fees for their MS4 inspection programs.</p> <p>Regional Board staff enters all inspection data and reports into SMARTS on a real-time basis (2-3 days after supervisor approval). The State Board SMARTS system can be accessed by the public and provides real time information of the status of General Industrial and General Construction Permittees.</p>	<p>None</p>
<p>Section VI.D.5.d.ii Inspect Critical Commercial Sources</p>	<p>The condition requires that: “Each Permittee shall inspect all commercial facilities identified in Part VI.D.5.b.” Please specify “critical” for commercial sources inspections, just so there is no question of the intent of this requirement and so that it is not misinterpreted to be <i>all</i> commercial facilities. Additionally, the Permit</p>	<p>Malibu</p>	<p>The Permit states the facilities to be inspected. The Order reads; <i>Each Permittee shall perform an initial mandatory compliance inspection at all commercial facilities identified in Part VI.D.6.b twice during the 5-year term of the Order...</i> <i>Part VI.D.6.b specifically refers to critical commercial sources.</i></p> <p>SEA is defined in Attachment A.</p>	<p>None</p>

	<p>requires: “Each Permittee shall require implementation of additional BMPs where storm water from the MS4 discharges to a significant ecological area (SEA).” It is not clear if the term SEA is the same as Environmentally Sensitive Area (ESA) from the previous/current permit or if it is a new designation. It is mentioned several times throughout the Permit. Please clarify.</p>			
Inspections	<p>Concern- Despite the LARWQCB staff’s stated understanding that the inspection of General Industrial Permitted facilities is a common effort shared by both the LARWQCB and the Permittees, this provision clearly appears to be a one-way and one sided effort.</p> <p>Proposed Solution – Revised language stating that LARWQCB should notify the respective Permittee of inspections performed by its staff, especially if there are findings that may cause or contribute to an exceedance of water quality objectives and result in a violation to the Municipal Permittee.</p>	Vernon	<p>Regional Board staff typically inspects 400 facilities covered by the General Industrial Storm Water Permit annually. Regional Board staff enters all inspection data and reports into SMARTS on a real-time basis (2-3 days after supervisor approval). The State Board SMARTS system can be accessed by the public and provides real time information of the status of General Industrial and General Construction Permittees. The site contain the inspection findings which note whether a site was in compliance, what the water quality issues are, and what if any Regional Board enforcement action(s) were forth coming.</p>	None
Industrial/Commercial Facilities	<p>Recommend you reference the CASQA Stormwater BMP Handbook Industrial</p>	Torrance	<p>This was originally proposed as it is in the Ventura County MS4 Permit but was objected to by multiple Permittees. Permittees may still choose to use the</p>	None

	and Commercial		CASQA Manual for BMP implementation and be compliant if BMPs are implemented per the manual for all pollutant generating activities.	
<i>Illicit Connections and Illicit Discharges Elimination</i>				
General	The Permit requires written standard operating procedures, written spill response plans, for the IC/ID Elimination Program. During the 2001 Permit term, the Model Program for Stormwater Quality Management Program was allowed approximately 6 months to be updated. As the Permit will require inter-agency response and coordination, sufficient time is required to develop, update, and coordinate such procedures with various impacted municipalities and non-Permittee agencies.	County of Los Angeles	The permit has been revised to allow Permittees six months from the effective date to begin implementation of new or enhanced minimum control measures, including provisions under the Illicit Discharge Detection and Elimination Program.	Revisions made.
General	The Permit requires Permittee to initiate a permanent solution if the source of the illicit discharge cannot be traced, including diversion of the entire flow to the sanitary sewer or treatment.	County of Los Angeles, LACFCD	This requirement is consistent with the prohibition of illicit discharges to the MS4 required by CWA section 402(p)(3)(B)(ii) and 40 CFR section 122.26(d)(2)(i).	None
General	We recommend that the permit allow the Watershed Management Programs to guide the customization of the Numeric Action Levels (NAL) based on the highest water quality priorities in each watershed and to establish them at a level that would provide better assurance that illicit discharges can actually be found and not have every outfall become a high priority outfall.	La Verne	The NALs are triggers for verifying compliance with the requirement to effectively prohibit non-storm water discharges to the MS4 and receiving waters that are a source of pollutants. Therefore, they are appropriately set based on the applicable water quality standards for the receiving waters. With the exception of non-storm water discharges from authorized sources, no pollutants should be discharged in non-storm water. NALs are only used where there is not a non-storm water WQBEL for the pollutant. The Oder states, <i>“ To evaluate monitoring data, the Permittee shall either use applicable Interim or Final Water Quality</i>	None

			<i>Based Effluent Limitations or, if there are no applicable Interim or Final Water Quality Based Effluent Limitations for the pollutant, use applicable Action Levels provided in Attachment H.”</i>	
Section VI.D.9.f.v Illicit Connection and Illicit Discharge Education and Training	Clarify that new “targeted” permittee staff members, as identified in Section VI.D.9.f.i, will receive IC/ID training. While Malibu trains as many staff members as possible (regardless of their position), the Permit, as currently written, still would mandate that all new employees need this training.	Malibu, South Bay Cities	The Tentative reads; <i>Each Permittee must continue to implement a training program regarding the identification of IC/IDs for all municipal field staff, who, as part of their normal job responsibilities (e.g., street sweeping, storm drain maintenance, collection system maintenance, road maintenance), may come into contact with or otherwise observe an illicit discharge or illicit connection to the MS4.</i> The Order specifies the targeted staff.	None
Part VI.D.9.a-f. - Illicit Connections and Illicit Discharges Elimination Program	Concern – While Permittees are being tasked with controlling and enforcing illicit discharges, the Tentative Permit expects permittees to prevent and control all illicit discharges. This is not practical or possible. In the world of criminal activity, no local, State or Federal agency can prevent every crime or terrorist attack from occurring – it is the same situation with social behaviors and being tasked with preventing all illicit discharge activity. For instance, an industrial facility can wash down their parking lot during a weekend and wash down the oil, grease and metals deposits while in residential communities feces from lawns could be washed down versus a dog-owner picking it up and throwing it in the trash.	Vernon, Santa Clarita	The Permit is consistent with the requirement in CWA section 402(p)(B)(3)(ii). Non-storm water discharges are not subject to the MEP standard, as discussed in the Non-Storm Water Discharges response to comments matrix. The meaning of “effectively prohibit” is defined in footnote 18 as, “to not allow the non-storm water discharge through the MS4 unless the discharger obtains coverage under a separate NPDES permit prior to discharge to the MS4.” This definition is based on the 1990 federal storm water rulemaking in which USEPA describes its expectations regarding control of non-storm water discharges that are a source of pollutants to the MS4. Federal law imposes this requirement on the permittees. Federal regulations at 40 CFR § 122.26(d)(2)(iv)(B) requires that MS4 permittees implement a program to detect and remove (or require the discharger to the MS4 to obtain a separate NPDES permit for) illicit discharges and improper disposal into the MS4.	None

	Proposed Solution – Language needs to be consistent throughout the permit and clearly state that the CWA provision requires this permit to “effectively prohibit non-storm water discharges.” As long as the Permittee is implementing appropriate BMPs the Permittee will not be in violation of this permit			
IC/ID	Illicit Connection Education and Training - having this in a separate section is duplicative and confusing. Please amend the public employee training section with information on ICID. Please also revise contractual services to include documentation from the contractor that they have trained their employees.	Santa Clarita, South Bay Cities	Training of appropriate staff is important enough to be called out in every minimum control measure category, though it creates some redundancy. The Board is assuming that if contractors are used to provide training, Permittees would request and provide a record of the training from the vendor.	None
<i>Municipal Action Levels</i>				
MALSS	Municipal Action Levels (MALs) established in Draft Order Attachment G, were "obtained by computing the upper 25th percentile for selected pollutants for Rain Zone 6." Despite this information, the Draft Permit does not provide transparency of how MALs were calculated (e.g. time period, land uses, etc. included in the calculation) and how non-detects were treated. The Program was not able to exactly reproduce the tentative MALs based on the National Stormwater Quality database,	Ventura Countywide Stormwater Quality Management Program	The MALs were obtained by calculating the upper 25 th percentile of selected pollutants for the entire Rain Zone 6 subset. No sampling events were eliminated except for those outside of Rain Zone 6. The MALs concept was introduced during the renewal process for the Ventura County MS4 Order and has been proposed at different levels as part of the permit development process. The Board finds that basing the MALs on the upper 10 th percentile is unnecessarily lenient and with the compliance strategy used (rolling 20% exceedance) the upper 25 th percentile is appropriate as a trigger for identifying drainage areas that should be prioritized for additional BMP implementation. Permittees may further prioritize within the set of drainage areas that exceed the MALs.	Attachment G was revised to clarify how the MAL values were calculated.

	although the 75th percentiles of all Rain Zone 6 data were similar in most cases (see Attachment 2). Furthermore the Draft Order MALs are lower compared to Orange County stormwater action levels, which introduce some inconsistency for no apparent reason between regions.			
<i>Treatment BMP Performance</i>				
Benchmarks	The proposed effluent benchmarks are not feasible and should be replaced by design parameters	City of Los Angeles, County of Los Angeles, LA Permit Group, Santa Clarita, Ventura Countywide Stormwater Quality Management Program, Contech	The intent of the inclusion of the treatment BMP benchmarks is to help ensure treatment BMPs are selected based on the class of pollutants expected to be discharged in significant quantities. The effluent performance of treatment BMPs is a key design parameter. The benchmarks are not effluent limits but are to be used as guidance in selecting treatment BMPs.	None
General	The Ventura County's NPDES MS4 permit requires the project developer to determine the pollutant of concern(s) for the development project and use this pollutant as the basis for selecting a top performing BMP. In the case of the Draft Order, there is no determination of the pollutant of concern for the development project. Instead post construction BMPs must meet all the benchmarks. Unfortunately, traditional post construction BMPs are not capable of meeting all the benchmarks and thus the developer will not be able to select a BMP. We recommend that provision VI.D.6.c.iv.(1)(a)	La Verne	The intent of the inclusion of the treatment BMP benchmarks is to help ensure treatment BMPs are selected based on the class of pollutants expected to be discharged in significant quantities. The effluent performance of treatment BMPs is a key design parameter. The benchmarks are not effluent limits but are to be used as guidance in selecting treatment BMPs. Additionally, the values have been recalculated based on the median values of the top six performing BMPs so that more than one BMP can achieve all the benchmark values.	Benchmark values recalculated.

	<p>(page 74) be modified so that the selection of post construction BMPs is consistent with the Ventura permit and is based on the development site's pollutant of concern(s) and the corresponding top performing BMP(s) that can meet the Table 11 benchmarks</p>			
<p><i>Planning and Land Development Program</i></p>				
<p>Infiltration</p>	<p>The tentative draft establishes significantly more restrictive infeasibility thresholds (i.e., maximum application of green roof and rainwater harvesting and 0.15 inches per hour infiltration rate) that must be met to allow treated runoff to leave a site, without regard for its consequences on geotechnical stability, public health and safety, or use of recycled water.</p>	<p>Downey, Monterey Park, BIASC/CICWQ</p>	<p>The Permit focuses on onsite retention as the preferred BMP and requires Permittees to consider all options before selecting other BMPs. This is consistent with State Board's Blue Ribbon Panel report which includes a suggested storm water control strategy as a combination of practices, with the first suggestion for the smaller storm events listed as: <i>On-site stormwater reuse, evapotranspiration and infiltration for the smallest storms and up to specific targeted events, depending on site limitations (soil characteristics and groundwater contamination potential) (usually by conservation design emphasizing infiltration, disconnecting paved areas, etc.)</i></p> <p>The infiltration rate of 0.15"/hr is for saturated soil conditions in contrast with the 0.5"/hr listed in the Ventura County Technical Guidance manual which is for dry soil conditions. Nevertheless staff has included a safety factor of "2" and will revise the threshold to 0.3"/hr infiltration rate for saturated soils.</p>	<p>The soil infiltration rate for infeasibility has been revised from 0.15"/hr saturated condition to 0.3"/hr saturated condition.</p>

<p>Infiltration</p>	<p>Change lower infiltration rate feasibility threshold from 0.15 inches per hour to 0.5 inches per hour.</p> <p>The lower infiltration rate threshold of 0.15 inches per hour is extremely low. A 0.5 inch per hour lower rate would be more consistent with other permits in Southern California. Typically, factors of safety between 2 and 8 are applied to the measured infiltration rate to produce a design infiltration that is used to size the infiltration BMP. This factor of safety combined with a target infiltration rate of 48 hours could result in very large systems with allowable effective depths of as little as one inch.</p>	<p>City of Los Angeles, Contech</p>	<p>This criterion is specified to ensure the viability of infiltration systems. Infiltration BMPs are restricted to Hydrologic Soil Groups A and B, by other California storm water regulatory agencies. For example, in Region 2 the Contra Costa County Program’s Stormwater LID Design Guidebook prohibits routing of storm water runoff to a dry (infiltration) well, developed in Hydrologic Soil Groups C and D. Class B soils have an infiltration rate of about 0.5 in/hr when dry, but the rates decrease to between 0.3 to 0.15 in/hr when saturated (see <i>USEPA Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act</i>, December 2009, Appendix A). By applying a Factor of Safety of 2, as is applied in various locations in the Ventura County TGM, the saturated infiltration rate is raised to 0.3 in/hr. As listed above this is the upper limit of the minimum infiltration rate as stated in the EISA reference. The Order is revised accordingly.</p>	<p>The following change has been made for VI.D.6.c.ii.(2).(a) to read “The infiltration rate of saturated soils is less than 0.3 inch per hour”.... Revised Attachment H.4.a 2nd sentence, 3rd line to the following: “demonstrated infiltration rate under saturated conditions of no less than 0.30 inch per hour.”</p>
<p>Biofiltration</p>	<p>The tentative draft characterizes biofiltration as an alternative compliance practice rather than a recognizing that technically it is a viable, very effective LID treatment solution.</p>	<p>BIASC/CICWQ</p>	<p>The Permit focuses on onsite retention as the preferred BMP and requires Permittees to consider all options before selecting other BMPs. This is consistent with State Board’s Blue Ribbon Panel report which includes a suggested storm water control strategy as a combination of practices, with the first level of BMP implementation for the smaller storm events listed as: <i>On-site stormwater reuse, evapotranspiration and infiltration for the smallest storms and up to specific targeted events, depending on site limitations (soil characteristics and groundwater contamination potential) (usually by conservation design emphasizing infiltration, disconnecting paved areas, etc.)</i></p>	<p>None</p>
<p>VI.D.6.a.i.(3) and (7) Storm Water Management</p>	<p>We recommend providing clarifying language that implementing the green streets manual to the MEP fulfills and</p>	<p>BIASC/CICWQ</p>	<p>While the Board concurs with the intent of the second part of the comment, section 6.a.i.(3) and (7) are the not the appropriate locations for inclusion. A more appropriate location is located at section</p>	<p>The following was inserted after the first sentence in</p>

<p>Program Minimum Control Measures, 6. Planning and Land Development Program, a. Purpose, i.(3) and (7)</p>	<p>supersedes all other development / redevelopment requirements (i.e., LID and/or hydromodification control).</p> <p>We recommend providing clarifying language that the green streets provision applies to standalone streets, roads, highways, and freeway projects, and also applies to streets within larger projects.</p> <p>This roadway requirement is consistent with the approved Ventura County MS4 Permit Technical Guidance Manual.</p>		<p>VI.D.6.b.i.(1).(g) as below.</p> <p>(g) Street and road construction of 10,000 square feet or more of impervious surface area shall follow USEPA guidance regarding Managing Wet Weather with Green Infrastructure: Green Streets²⁷ to the maximum extent practicable.</p> <p>This subsection would be expanded to clarify that green streets provision applies to standalone streets, roads, highways, and freeway projects, and also applies to streets within larger projects. It is not appropriate however for implementation of green streets to replace all other development / redevelopment requirements (i.e., LID and/or hydromodification control).</p>	<p>VI.D.6.b.i.(1).(g) “Street and road construction applies to standalone streets, roads, highways, and freeway projects, and also applies to streets within larger projects.”</p>
<p>General</p>	<p>The tentative draft includes detailed LID design standards rather than establishing a requirement for the Permittee’s to develop technical guidance to implement the standards. Those standards depart significantly from the standards of the Ventura County MS4 Permit and TGM, requiring LID BMPs that must be significantly larger than those required under the adopted Ventura permit, and much more frequent implementation of substantially more expensive BMPs (green roofs and large cisterns/onsite use) regardless of regulatory impediments.</p>	<p>LA Permit Group, Inglewood, La Verne, BIASC/CICWQ</p>	<p>The Permit allows Permittees to submit alternative BMPs for Executive Officer approval if desired. This alternative is consistent with the Ventura County MS4 Technical Guidance Manual which required Executive Officer Approval prior to adoption. The design specifications are default requirements for Permittees who do not have or wish to pursue alternative design specifications. Further, many of these specifications are based on those contained in the Ventura County Technical Guidance Manual or others recently developed across California.</p>	<p>None</p>
<p>General</p>	<p>Recommend that residential developments of one or two units be excluded from the strict</p>	<p>Peninsula Cities</p>	<p>The project categories are identical to those in the current Ventura County MS4 Permit and for the most part, the current LA County MS4 Permit.</p>	<p>None</p>

	numeric design criteria in favor of a simpler LID approach.			
VI.D.6.c.i.(3) and (4) Storm Water Management Program Minimum Control Measures, 6. Planning and Land Development Program, c. New Development/R edevelopment Project Performance Criteria, i. Integrated Water Quality/Flow Reduction Resources Management Criteria (3)(4).	<p>The Tentative Order does not support the established hierarchy of LID BMP selection found in similar Phase I MS4 permits adopted in California since 2007, and as most recently as 2010. The Tentative Order establishes a zero discharge threshold for compliance with the Integrated Water Quality/Flow Reduction criteria in subpart (2) that is inconsistent with the application of LID technologies for stormwater management. The exclusion of LID biofiltration technologies in meeting the onsite capture standard is without merit or technical support.</p> <p>Design criteria for bioretention and biofiltration found in (3) should be deleted, and instead moved to technical guidance. In addition, delete (4) “consider the maximum potential for evapotranspiration from green roofs and rainfall harvest and use”, and instead address these options for application in technical guidance specific to LA County.</p>	BIASC/CICWQ	<p>LID strategies are designed to retain storm water runoff onsite by minimizing soil compaction and impervious surfaces, and by disconnecting storm water runoff from conveyances to the storm drain system. This Order establishes criteria for the volume of storm water to be retained onsite as required to meet water quality goals and to preserve pre-development hydrology in natural drainage systems.</p> <p>(2) Biofiltration is not inherently a volume capture BMP and is designed with an underdrain which may allow for the discharge of a significant portion of the design storm volume. Biofiltration is therefore used in the alternative compliance measures; however, the hierarchy and requirements for the use of Biofiltration are the same as those adopted by this Board in the Ventura County MS4 Permit.</p> <p>(3) The Permit allows Permittees to submit alternative BMPs for Executive Officer approval if desired. This alternative is consistent with the Ventura MS4 Technical Guidance Manual which required Executive Officer Approval prior to adoption. The design specifications are default requirements for Permittees who do not have or wish to pursue alternative design specifications.</p> <p>(4) Comment noted. The Board elected to set no specific criteria for maximum potential, and to instead allow developers to develop justification for green roofs and rainfall harvesting to the full extent at the discretion of the Permittees.</p>	Language was revised to make it clear alternative Biofiltration criteria could be used with Executive Officer approval.
VI.D.6.c.iii.1.b.i	The requirement for raised underdrain placement to achieve nitrogen removal is inconsistent with standard industry designs	City of Los Angeles	Placing the underdrain near the top of the gravel layer will maximize the amount of runoff that is captured and infiltrated into the ground, in adequately draining soils, as opposed to being discharged through the underdrain.	Replaced “Attachment I” with “Attachment H”

	<p>and is based on limited evidence that this change will improve nitrogen removal. Furthermore by raising the underdrain, other water quality problems may result such as low dissolved oxygen and bacterial growth due to the septic conditions that will be created. Also the second sentence should refer to Appendix H not I.</p>		<p>Additionally, research has shown that such a design provides enhanced nitrogen removal (<i>Biofiltration facilities have the added benefit of enhanced nitrogen removal due to the elevated underdrain. This allows for a fluctuating anaerobic/aerobic zone below the drain pipe. The intention is that denitrification within the anaerobic/anoxic zone is facilitated by microbes using forms of nitrogen (NO2 and NO3) instead of oxygen for respiration.</i>). Page 6-87, Ventura County Technical Guidance Manual for Stormwater Quality Control Measures July 13, 2011</p> <p>Language in Attachment H specifies that underdrains should be placed within 6 inches of the bottom of the gravel layer in poorly draining soils to prevent the retention of stagnant water.</p> <p>Regarding the reference to Appendix I, Order should state “Appendix H.” The Order is revised accordingly.</p>	<p>VI.D.6.c.iii.1.b.ii in second sentence.</p>
General	<p>The tentative draft permit seeks to force implementation of certain BMP technologies (e.g., green roofs, harvest and use), to the point of requiring local ordinance changes that are inconsistent with other current state building and public health regulations, rather than allowing a project to select BMPs to meet a performance-based standard established by the permit.</p>	<p>Temple City, BIASC/CICWQ</p>	<p>The Permit focuses on onsite retention as the preferred BMP and requires Permittees to consider all options before selecting other BMPs. This is consistent with State Board’s Blue Ribbon Panel report which includes a suggested storm water control strategy as a combination of practices, with the first suggestion for the smaller storm events listed as: On-site stormwater reuse, evapotranspiration and infiltration for the smallest storms and up to specific targeted events, depending on site limitations (soil characteristics and groundwater contamination potential) (usually by conservation design emphasizing infiltration, disconnecting paved areas, etc.)</p>	<p>None</p>
General	<p>The Tentative Draft Permit BMP implementation requirements are overly prescriptive and will constrain future improvements in BMPs.</p>	<p>BIASC/CICWQ</p>	<p>The Permit allows Permittees to submit alternative BMPs for Executive Officer approval if desired. This alternative is consistent with the Ventura County MS4 Technical Guidance Manual which required Executive Officer Approval prior to adoption. The design</p>	<p>None</p>

			specifications are default requirements for Permittees who do not have or wish to pursue alternative design specifications.	
General	The Permit should allow for the creation of Regional Stormwater Mitigation Plans.	BIASC/CICWQ	The Order allows offsite mitigation strategies such as the retrofit of existing developments and groundwater replenishment projects. These work in conjunction with onsite retention requirements which when combined are the equivalent of Regional Plans. The permit has been revised to also include the option for a permittee or group of permittees to implement a regional or sub-regional storm water mitigation program to substitute in whole or part for new and re-development requirements.	Revision made.
VI.D.6.c.i.(2) Storm Water Management Program Minimum Control Measures, 6. Planning and Land Development Program, c. New Development/Re-development Project Performance Criteria, i. Integrated Water Quality/Flow Reduction Resources Management Criteria (2).	<p>The Staff working proposal MCM released in March 2012 provided an option for a project proponent to use an offsite location to manage an equivalent volume of stormwater if co-equal water quality and water supply objectives are established. In the Tentative Order the opportunity for regional groundwater replenishment has been relegated to an Alternative Compliance option.</p> <p>We request that this option be restored as co-equal to onsite management of the SWQDv.</p> <p>Allow projects that are within the contributing watershed area of an “Opportunity for Regional Groundwater Replenishment” to “opt in” to the Regional Groundwater Replenishment Project as a compliance option that is co-equal to onsite</p>	BIASC/CICWQ	The Board is revising this section to include a tiered system of alternative compliance; with all actions other than the onsite management of the SWQDv assigned co-equal second tier status. As the Permit is focused on water quality and the easiest method of demonstrating compliance is the onsite retention of the SWQDv.	A stand-alone section was created for Groundwater Replenishment Projects.

	management of the SWQDv per VI.D.6.c.i.(2)			
Offsite mitigation will be difficult to implement	Even without the proposed restrictions to offsite mitigation, the Bureau believes that this alternative will be rarely exercised. As part of the City’s low impact Development, an in-lieu fee was considered and not incorporated and we view onsite mitigation as the most practical approach. The State’s Mitigation Fee Act, California Code Section 66000-66008 has additional requirements for collecting mitigation fees for approving development projects. These restrictions create cumbersome, accounting, and legal consideration and the City may not be able to meet. For these reasons we encourage flexibility in implementing on-site BMPs, including allowing planter boxes with impermeable liner and treatment systems without the need of implementing offsite projects.	City of Los Angeles	The Board recognizes the complex watersheds within LA County and wanted to include as many options as reasonable for complying with New/Redevelopment provisions. While the Board has heard commenters state they would prefer not to use offsite mitigation, its possible there may be Permittees who may choose this option. The Board has revised the planter box definition such that onsite compliance is more attainable using planter boxes.	No change for the offsite mitigation option, but planter box definition has been revised such that onsite compliance is feasible using planter boxes.
Rehabilitation projects	We agree that watershed control measures may include stream and/or habitat rehabilitation or restoration projects where they will contribute to demonstrable improvements of the physical, chemical and biological receiving water conditions. Please clarify that such projects	Peninsula Cities	As long as the projects comply with provisions of Section VI.D.6.c.iii.3, the Board has no issues with using rehabilitation type projects. The requirements are detailed in that section.	None

	are also appropriate candidates for retrofit for purposes of offsite volume mitigation by so indicating in VI.D.6.c.iii(4)(e).			
General	Recommend that VI.D.6.d.i.(1) be modified to read: “Documentation shall be submitted within 180 days after the effective date of this Order for local LID ordinances in effect at the time of adoption, and for local LID ordinances developed subsequent to the effective date of the permit a documentation of local equivalence shall be provided to the Regional Board Executive officer for approval prior to final adoption of the local LID ordinance.	Peninsula Cities, South Bay Cities, Torrance	Comment noted, but the Board finds the proposed language is appropriate in clarity and content.	None
Section VI.D.6.c.iii.4.b Offsite Project - Retrofit Existing Development	The City requests that the Regional Board add a footnote to explain where to find definitions and acronyms for HUCs and also include the information in Attachment A – Definitions since this is a new and unfamiliar term in this Permit.	Malibu	Comment noted. The Board has added a clarifying footnote per suggestion.	Language was revised per suggestion.
Biofiltration should be considered equivalent to retain on-site.	If the 1.5 x SWQDv requirements is kept that allows for the over-sizing of the biofiltration BMPs, please clarify that the biofiltration BMPs are considered as equivalent as “retain on site” BMPs. Biofiltration BMPs such as planter boxes allow for a significant loss of the stormwater runoff through evaporation and transpiration.	LA Permit Group, City of Los Angeles	In the Order, the Board has separated and specified all offsite project categories and requirements. To help provide clarity to the Section, The Board has revised the Order language for the biofiltration provision section. Provisions regarding planter boxes have also been revised.	Order language revised to read: Conditions for Onsite-Biofiltration

<p>Planning and Land Development</p>	<p>Groundwater replenishment is definitely not an option in most areas, as the City does not have a viable aquifer due to geological conditions. Retrofitting an existing developed site has limited options, as Malibu already has a high percentage of open and undeveloped space and existing developed space that is primarily low density and rural residential, and the City has few existing commercial properties. The only feasible option left for the very limited number projects that are in the City, which are already heavily regulated by the City's approved Local Coastal Plan, is the onsite biofiltration systems. However, requiring 1.5 times the SWQDv is excessive, arbitrarily assigned and without any substantiation that treating 1.5 the volume will significantly improve the water quality any more than a design using the SWQDv.</p>	<p>Malibu</p>	<p>Groundwater replenishment is not mandated, but an option Permittees can use to comply with New and Redevelopment requirements.</p> <p>Studies in the current Ventura County Technical Guidance manual indicate there is an improvement in water quality by biofiltrating 1.5 times the SWDQv required for onsite retention.</p>	<p>None</p>
<p>Biofiltration</p>	<p>The biofiltration definition limits the systems that allow incidental infiltration. Many municipal ordinances and established engineering practices will not allow even incidental infiltration if the planter boxes are located adjacent to a building structure. Thus, this definition will exclude the most common types of planter boxes which logically have to be placed next to the building to</p>	<p>LA Permit Group</p>	<p>Flow through Biofiltration is allowed to meet on site compliance but must be sized at 1.5 times the volume of runoff that is required to be retained on site.</p>	<p>None</p>

	collect roof runoff. For this reason, consider allowing biofiltration to include planter boxes without incidental infiltration since they may be the only applicable BMPs.			
Definition A-1 Biofiltration	Industry standards considers planter boxes are a form of biofiltration. Recommend incorporating the language from the planter boxes definition into the biofiltration. Depending on the soil conditions, biofiltration may or may not be infiltrated into the ground; regardless runoff will be infiltrated through a soil media.	City of Los Angeles	Comment noted. The definition of Planter Boxes in Attachment A – Definitions has been modified to reflect the requested change and also to reference the design criteria contained in Attachment H.	Revision to Attachment A – Definitions. Planter boxes and other flow-through treatment BMPs To comply with the biofiltration requirements in part VI.D.6.c.iii(1) of this Order, Planter Boxes must be designed in accordance with the biofiltration criteria contained in Attachment H.
Offsite projects	The conditions listed for offsite projects are overly restrictive. Consider expanding the location of the offsite projects to within watershed or within the permittees jurisdiction so there will be better opportunities and flexibility for permittees.	City of Los Angeles	The Order allows the use of the HUC 10 subwatershed for offsite projects, which can be greater than 50 sq. miles without RB approval. The Order allows even more flexibility than this with Executive Officer approval.	None
Onsite retention	The emphasis of this permit should be focused on water quality. The requirement to place	Baldwin Park, Carson, Covina, Duarte, Lawndale,	The Board agrees and will revise the Order to emphasize the prioritization of onsite retention.	Order was revised to create a stand-alone

	projects to maximize ground water recharge benefit will not necessarily improve water quality.	City of Los Angeles, County of Los Angeles, Pico Rivera, San Gabriel, West Covina		section for Groundwater Replenishment Projects.
Onsite retention	As drafted, the tentative draft permit creates fewer hurdles and requirements for onsite retention than for Regional Groundwater Replenishment, and potentially makes offsite capture as difficult to implement as other types of alternative compliance solutions.	BIASC/CICWQ	The Permit intentionally emphasizes onsite retention as a priority. The Board finds it is important to provide adequate requirements to ensure offsite projects provide equivalent water quality benefits as onsite compliance strategies.	None
In-lieu fee is not feasible	Our experience when considering an in-lieu fee for untreated runoff was that there would not be enough fees collected to implement a project. In addition the proposed fee was scrutinized and challenged by the building industry and this condition may not be legally defensible. Please remove these conditions if offsite mitigation is kept as an alternative.	City of Los Angeles, County of Los Angeles	The Board in recognition of the complex watersheds within LA County wanted to include as many options as reasonable for complying with New/Redevelopment provisions. The in-lieu fee option may be feasible for some Permittees.	None
Erosion Potential	Erosion Potential (Ep) is not a widely used term in our region, and may not be the most appropriate term to be used as an indicator of the potential hydromodification impacts.	LA Permit Group, City of Los Angeles	Erosion Potential is used in the current Ventura County MS4 Order and is used in the SCCWRP Hydromodification manual that was recently released.	None
Erosion Potential	Clarify Ep formula, in addition, Ep Equation in Appendix J shall be checked for accuracy and the parameters and their units shall be adequately defined.	County of Los Angeles	The equation was corrected and revised for clarity.	Language was revised.
Hydromodification	The requirement to retain on site the 95 th percentile storm is	City of Los Angeles	The requirement to retain on site the 95 th percentile storm is one of several options for complying with the	None

	excessive and inconsistent with all other storm design parameters that appear in this order. It may also not be an appropriate storm in terms of soil deposits for the soil deprived streams such as Santa Clara Creek. Again consider referring to the statewide policy for a consistent and technical basis of the hydromodification requirements.		hydromodification requirements. It is not mandated that a Permittee utilize this option.	
Erosion Potential	Instead of using the Erosion Potential (Ep) method, the critical flow that triggers the movement of sediment can be computed. This critical flow shall be less than the 85 or 95 percentile values to achieve hydromodification.	County of Los Angeles	The Order allows multiple strategies to comply with interim Hydromodification requirements. Staff will allow Permittees to utilize findings from the recent SCCWRP Hydromodification study to come up with their final criteria for hydromodification requirements and another alternative was included to allow the use of the 2009 LACFCD LID Manual.	The Hydromodification section was revised.
Storm Event	I am unaware of any studies that have evaluated the use of the 2-yr, 24-hr storm event (as either an infiltration volume or as a basis for matching flow rates, volumes and durations) to determine its equivalence to an Erosion Potential metric or to a flow control criteria using a range of geomorphically significant flows. Options 1 and 2 do not appear to have any basis in the scientific literature.	Felicia Federico (UCLA)	The 2 year, 24 hour storm event was taken from the USEPA’s guidance for Federal facilities which linked the storm event to hydromodification control. By having project proponents mimic predevelopment conditions for their project by retaining frequently occurring storm onsite, the impact of flow as a pollutant should be appropriately mitigated. . If State or Regional Water Board adopts a policy or criteria, this requirement may be amended to include the pertinent criteria.	None
HAS	The Ventura County MS4 Permit (finalized by the Los Angeles Regional Board in January 2010) contains requirements for a Hydromodification Analysis Study (HAS) for projects	Felicia Federico (UCLA)	The HAS requirement in the Ventura Order is a compliance option in the Tentative Order. Additionally, the permit allows options including onsite retention of the 2 year, 24 hour storm, and the matching of pre and post development runoff flow for the 2 year, 24 hour storm. . If State or Regional	None

	<p>disturbing 50 acres or greater. The HAS must demonstrate that post development conditions approximate pre-project erosive effects in receiving waters through the incorporation of an Erosion Potential or equivalent metric. I recommend that the Board modify the draft tentative order for Los Angeles County to be consistent with the Ventura County Permit hydromodification control criteria for projects of 50 acres or greater.</p>		<p>Water Board adopts a policy or criteria; the permit may be modified to include new hydromodification criteria.</p>	
<p>Work equations</p>	<p>I also suggest that Attachment J be modified to indicate that the Work equation shown is just one of several equations that could be used to calculate an Erosion Potential. Other options include sediment transport function such as the Brownlie equation or the Meyer-Peter and Muller equation⁵. Allowing additional options supported by the scientific literature will permit the use of equations most appropriate for the characteristics of the receiving channel.</p>	<p>Felicia Federico (UCLA)</p>	<p>The Board agrees and will include additional work equations.</p>	<p>Language was revised.</p>
	<p>Site retention of the 95 percentile storm was suggested to achieve modification. Specify the duration of the storm. For Water Quality purpose such as Hydromodification and TMDLs, the percentile is a preferred method. The 2-year 24-hour rainfall event is good for</p>	<p>County of Los Angeles</p>	<p>The Board agrees.</p>	<p>The Order language was revised to include storm duration.</p>

	analyzing extreme events like floods.			
VI.D.6.c.v.(1).(b).(iii) and (1).(c).(i).1 Storm Water Management Program Minimum Control Measures, 6. Planning and Land Development Program, c. New Development/Redevelopment Project Performance Criteria v. Hydromodification (Flow/Volume/Duration) Control Criteria (1)(b)(iii) and (1)(c)(i)1.	<p>We recommend providing a definition for pre-project condition.</p> <p>We recommend striking (1)(c)(i)1 and allowing projects less than 50 acres to install LID BMPs to the MEP per process described in Part VI.D.6.c.i, to meet interim hydromodification control standards. In addition, allow projects an additional option of complying with existing LA County Hydromodification Control Requirements found on pages 19 and 20 in the County of Los Angeles Low Impact Development Standards Manual, January 2009.</p>	BIASC/CICWQ	<p>Part VI.D.6.c.i includes the following LID option to satisfy Hydromodification requirements for sites less than 50 acres: <i>“The project is designed to retain on-site, through infiltration, evapotranspiration, and/or harvest and use, the storm water volume from the runoff of the 95th percentile storm”.</i></p> <p>The hydromodification specifications in the Order were developed on the basis of additional data and information on effective control of Hydromodification impacts that has become available since 2001, for example, SCCWRP Technical Report 667. If State or Regional Water Board adopts a policy or criteria, this requirement will be amended to include the pertinent criteria.</p>	Language in the Order was revised to allow the additional option of complying with existing LA County Hydromodification Control Requirements found on pages 19 and 20 in the County of Los Angeles Low Impact Development Standards Manual, January 2009.
Hydromodification	The draft permit should be revised to allow permittees to use currently adopted hydromodification control standards as an alternative to the Interim hydromodification Control Criteria proposed in the Tentative Order.	LA Permit Group, La Verne, Santa Clarita, BIASC/CICWQ	The hydromodification specifications in the Order were developed on the basis of additional data and information on effective control of Hydromodification impacts that has become available since 2001 (see, for example, SCCWRP Technical Report 667). A variety of options are available to Permittees; the permit has been revised to also allow the use of the existing LA County Hydromodification Control Requirements found on pages 19 and 20 in the County of Los Angeles Low Impact Development Standards Manual, January	Language in the Order was revised

			2009.	
Section VI.D.6.c.v.1.b Exemptions to Hydromodification Controls	This condition states, “Permittees may exempt the following New Development and Redevelopment projects from implementation of hydromodification controls where assessments of downstream channel conditions and proposed discharge hydrology indicate that adverse hydromodification effects to present and future beneficial uses of Natural Drainage Systems are unlikely.” Permittees have no means to determine what future beneficial uses may be, only what current beneficial use determinations have been established. Please delete “and future.”	Malibu	The Board agrees and will delete the “future” reference.	Language was revised.
Hydromodification	Exempt single family home projects of just one unit from the interim hydromodification requirement until the adoption of the State or Regional Water Board final hydromodification policy or criteria--this will provide for sufficient review time to consider what approach is appropriate for projects of one unit	Peninsula Cities	The Order only requires Hydromodification for projects 1 acre and above. For the single unit homes, that meet this threshold, the permit has been revised to include language similar to the Ventura County MS4 Permit that states, “LID implemented on single family homes will be sufficient to comply with interim Hydromodification criteria.”	Revision made.
Development Control Program	Erosion potential analysis for under an acre is unnecessarily strict and will require expertise these types of project proponents do not have. Please remove this requirement.	Santa Clarita	Hydromodification requirements apply to projects 1 acre or greater.	None
LID	Permittees that have adopted LID ordinances and corresponding	Downey, LA Permit Group, County of	The Order includes an LID Equivalence provision addressing the commenter’s suggestion.	None

	technical documents should be allowed to implement those existing requirements.	Los Angeles		
LID	As mentioned above, the City has a substantial LID program. Credit should be given to cities, such as Downey, that will have lowered the volume of runoff so that miniscule amounts of runoff that may from time to time exceed water quality standard not be considered violations (Water Quality Standards should be mass- bases as well as concentration-based.)	Downey	The Watershed Management Program has been revised to allow for Enhanced Watershed Management Programs that maximize retention of the 85 th percentile 24-hour storm, and to specify how compliance will be determined where Permittees elect to develop and implement such a program.	Revision made to Part VI.C.
VI.D.6.d.i Storm Water Management Program Minimum Control Measures, 6. Planning and Land Development Program. d. Implementation, i. Local Ordinance Equivalence	We recommend recognizing regional mitigation programs in addition to local ordinances that provide program equivalence Local ordinances and regional mitigation programs provide greater program flexibility, allow jurisdictional specific water quality issues to be directly addressed at a local level, and allow regional projects to incorporate and achieve multiple benefits while meeting water quality standards.	BIASC/CICWQ	The permit has been revised to include the option for a permittee or group of permittees to implement a regional or sub-regional storm water mitigation program to substitute in whole or part for new and re-development requirements.	Revision made to Part VI.D.7.(c).
VI.D.6.c.vi. Storm Water Management Program Minimum Control Measures, 6.	We recommend moving this paragraph/clause to the section addressing alternative compliance measures when using LID BMPs. There is a similar statement in Ventura County MS4 permit	BIASC/CICWQ	The Order is revised accordingly.	Language revised.

<p>Planning and Land Development Program, c. New Development/Redevelopment Project Performance Criteria, vi. Watershed Equivalence</p>	<p>(July 2010), which appears on page 59 within Section III. New Development/Redevelopment Performance Criteria. 2.(d)</p>			
<p>Existing projects</p>	<p>Language of the draft Permit states that: (d) Existing Development or Redevelopment projects shall mean projects that have been constructed or for which grading or land disturbance permits have been submitted and deemed complete prior to the adoption date of this Order, except as otherwise specified in this Order.” The ideal time to incorporate LID into projects is during the early planning phases before tentative maps have been approved. Projects that are already past this stage should be considered to be existing projects.</p>	<p>County of Los Angeles, BIASC/CICWQ</p>	<p>The Board concurs.</p>	<p>The grandfathering language will be revised to be consistent with the current Ventura County MS4 Order.</p>
<p>Schedule</p>	<p>The schedule for third party petition of offsite projects or EO approval should not be open ended but limited to 30 days.</p>	<p>County of Los Angeles</p>	<p>The Board agrees the schedule for 3rd party petition should not be open ended.</p>	<p>Staff will include language with a specific time frame for the public noticing of offsite projects.</p>
<p>BMP Treatment</p>	<p>Such requirements center on the treatment of stormwater runoff</p>	<p>County of Los Angeles</p>	<p>The BMP Treatment section is focused on BMP performance. Permittees have the legal authority to</p>	<p>Language revised.</p>

	<p>from the project site, including meeting the pollutant specific benchmarks set forth in the attached table (Table 11) and <u>“ensure that the discharge does not cause or contribute to an exceedance of water quality standards at the Permittee’s downstream MS4 outfall.”</u> We have some concerns with respect to the second requirement. The requirement not to cause or contribute to exceedance of a water quality standard is not contained in the CWA, which only requires Permittees to effectively prevent non-stormwater discharges to the MS4 and to take steps to the MEP to address pollutants in discharges from the MS4. Additionally, more clarity is needed on the meaning of “Permittee’s downstream MS4 outfall.”</p>		<p>control discharges from new and redevelopment to their MS4s to ensure that such discharges do not contain pollutants at level that would cause MS4 discharges to result in exceedances of water quality standards in the receiving waters downstream of the project location. These Treatment BMP Performance Standards are intended to support Permittees’ ability to adequately control discharges of pollutants from new and re-development.</p> <p>The comment regarding the provisions requiring that discharges from the MS4 do not cause or contribute to exceedances of receiving water limitations is addressed in the response to comments on the Receiving Water Limitations provisions.</p>	
General	<p>Projects that treat water offsite through retention, infiltration or use should not also have to treat water onsite.</p>	<p>LA Permit Group, La Verne, City of Los Angeles, County of Los Angeles</p>	<p>This provision is consistent with the Los Angeles Water Board’s approach as adopted in the Ventura County MS4 Permit in 2010. Projects where on-site retention or biofiltration is not feasible, permittees, at a minimum, must still implement control measures to reduce the discharges of pollutants from the site to the maximum extent practicable.</p>	<p>None</p>
Maintenance agreements	<p>Requiring maintenance agreements for all LID practices is highly problematic. Most LID strategies will be implemented at the site level (including individual residents) and to require homeowners to enter into</p>	<p>Inglewood, LA Permit Group, La Verne, County of Los Angeles</p>	<p>The Board agrees regarding maintenance agreements for simple site level LID BMPs</p>	<p>The Order language will be revised to remove LID BMPs implemented within single-</p>

	<p>maintenance agreements for their LID practices is impractical and a huge cost implications. Rather the maintenance agreements should be limited to regional facilities and/or treatment control BMPs.</p>			<p>family residences from the maintenance agreement provision.</p>
<p>General</p>	<p>The annual requirement that each Permittee prepare a list of mitigation project descriptions and pollutant and flow reduction analyses comparing the expected aggregate results of alternative compliance projects to results that would otherwise have been achieved by retaining on site the SWQDv is a significant new undertaking and will require significant technical resources, most likely through outside expertise. Due to the timeframes associated with the mitigation programs, in particular the off-site mitigation projects, such an analysis should not be required every year, but more appropriately once every four-five years in line with the time frame for offsite mitigation timelines and in order to provide meaningful information.</p>	<p>Peninsula Cities</p>	<p>The Board agrees; the timeframe has been revised to 4 years after adoption of the Order for the complete analysis. However, contributing flows from projects that are addressed by offsite projects should be listed on an annual basis though, in order to verify the comprehensive report due at a later date.</p>	<p>The timeframe and respective language was revised to 4 years per commenter suggestion.</p>
<p>Attachment E Effectiveness tracking database</p>	<p>This list of effectiveness tracking does not match with the information provided on Section VI.D.6.d.iv on page 82. Also delete item 11 from the list since this is not a site specific feature and can be easily mapped for our</p>	<p>City of Los Angeles</p>	<p>The development/re-development database required in Attachment E, section X is not intended to satisfy the post-construction BMP database requirements in Section VI.D.6.d.iv, although they may have similar components. While the purpose of the former is to maintain an up-to-date inventory of new projects, the post-construction BMP database will store data</p>	<p>None</p>

	region using rain gage data.		obtained during inspections. The requirement to provide the one-year, one-hour storm intensity as depicted on the most recently issued isohyetal map published by the Los Angeles County Hydrologist is necessary to ensure uniform design standards. The Regional Water Board cannot verify the accuracy of rain gauge data on a site-by-site basis.	
Attachment E, XVIII.A.2.d, Pg. E-43 Effectiveness Assessment of Stormwater Controls	Part XVIII.A.2.d requires the following “For natural drainage systems, develop a reference watershed flow duration curve and compare it to a flow duration curve for the subwatershed under current conditions.” This requirement is not appropriate for the City of Los Angeles, since only a very small part of the City drains into a natural drainage system and no reference subwatershed may be found since Los Angeles is substantially developed. The City of Los Angeles would accept in participating for a limited comparison study with other municipalities. However we believe this condition will be applicable for permittees that Permittees that have significant areas that drain to natural drainage systems.	City of Los Angeles	A natural drainage system is a drainage system that has not been improved (e.g., channelized or armored). The clearing or dredging of a natural drainage system does not cause the system to be classified as an improved drainage system. The Southern California Coastal Water Research Project has identified several natural watersheds in the Los Angeles Region that may serve as a reference watershed. The reference subwatershed does not need to be within the City of Los Angeles. (See Hydromodification Assessment and Management in California, Technical Report 667 - April 2012, Eric D. Stein, Felicia Federico, Derek B. Booth, Brian P. Bledsoe, Chris Bowles, Zan Rubin, G. Mathias Kondolf, and Ashmita Sengupta.) Additionally, Permittees are encouraged to address this requirement cooperatively on a watershed basis.	None
BMP inspection	BMP inspection based on a fixed time interval is arbitrary and poor use of resources. The Permittee should be allowed to prioritize inspection based on previous inspection history.	County of Los Angeles	The maintenance of BMPs is crucial to their performance and unless a regular interval is set, it is staff’s experience that many times the maintenance is not performed. Permittees can utilize the BMP substitution clause if they are able to demonstrate the specified level of maintenance is not necessary.	None

<p>VI.D.6.d.iv.(1).(c).(ii) Planning and Land Development Program/Construction Inspection</p>	<p>Change inspection frequency to 2x per year at the beginning and end of rainy season or inspection per the CASQA Stormwater BMP Handbook for New Development and Redevelopment for the first two years of operation with future inspection frequency of up to 2 years allowed only if BMP demonstrates adequate performance without the need for maintenance during the first two years. If more frequent maintenance is required, at a greater than 2 year interval, inspection frequency should be 2x the required maintenance frequency.</p> <p>This section is critical for the long term operation and performance of BMPs. With failure rates in the range of 50% for biotreatment and infiltration BMPs within the first two years of construction, it is important that regular and frequent inspection be undertaken. Inspection results should become a basis for future inspection and maintenance frequency. Most landscape based BMPs require regular vegetation maintenance with replacement of mulch and clearing of debris and sediment at least annually.</p>	<p>Contech</p>	<p>Comment noted. This frequency was agreed upon by the Regional Water Board and the Permittees in recognition of the very large number of currently implemented post-construction BMPs and projected implementation in the future.</p>	<p>None</p>
<p>Annual report</p>	<p>The Tentative Permit requires annual reports by the other parties demonstrating proper maintenance and operations"</p>	<p>County of Los Angeles</p>	<p>The Board agrees that requiring annual reports by private property owners is difficult and requiring them to retain maintenance records on site is a practicable alternative.</p>	<p>Revised language to require record retention on site for private</p>

	This proposed language is not practical and is difficult to enforce on private property owners. As an alternative we recommend that private property owners should maintain their records on site, and make them available upon request.			property owners.
Performance criteria	The Draft Permit's Performance Criteria Appropriately Require New Development and Redevelopment Projects to Retain On-Site the 0.75-inch, 24-hour rain event or the 85th percentile, 24-hour rain event, whichever is larger.	Environmental Groups	The Board concurs.	None
Design volume	The Draft Order in Provision D.6.c.i (page 70) requires the developer to retain the stormwater quality design volume as calculated by either the 0.75 inch storm or the 85th percentile 24 hour storm whichever is greater.	LA Permit Group, Inglewood, La Verne	The 0.75" storm water quality design volume for SUSMP in the current LA County MS4 Permit is the 85 th percentile 24 hour storm event for the downtown LA rain gauge. It was accepted as the default to aid smaller project proponents in designing their SUSMP manual, because at that time the 2004 LA County hydrology manual with isohyetal maps for LA County was not in place. This provision requires the greater of the two thresholds to maintain the level of water quality protection required by the previous permit. The core requirement is based on the 85 th percentile 24 hour storm.	None
General	The Draft Permit's Planning and Land Use Program Fails to Meet the Requirements of the MEP Standard Due to its Unjustifiably Lenient Applicability Thresholds For New Development, is Hampered by a Lack of Clarity with respect to Alternative Compliance, Would Improperly Allow for Biofiltration to be Used	Environmental Groups	The project thresholds included in the Order are consistent with the Ventura County MS4 Order and with the majority of the MS4 Permits in the State. The thresholds are reasonable in light of the onsite retention requirement for project categories. The technical infeasibility discussion is reasonable as written.	None

	When On-Site Retention is Feasible, and Creates an Unlawful Self-Regulatory Scheme in Violation of the Clean Water Act.			
Threshold	The Applicability Threshold for New Development Projects is Set Unjustifiably High and Fails to Meet MEP	Environmental Groups	The project thresholds included in the Order are consistent with the Ventura County MS4 Order and with the majority of the MS4 permits in the State. The thresholds are reasonable in light of the onsite retention requirement. The technical infeasibility is reasonable as written.	None
Repaving	Repaving of Greater than 10,000 Square Feet of Surface Area on Publicly Owned Streets or Parking Lots Should Trigger Requirements to Meet Post-Construction Low Impact Development Standards	Environmental Groups	The Order exempts these categories if the original grade and line are kept because in order to ensure the soil has adequate infiltration capacity it would mean that the soil underneath the surface would have to be amended and prepped to ensure adequate runoff capacity is available and geological stability is maintained. This would turn routine maintenance projects into major construction.	None
Groundwater replenishment	The Draft Permit's Alternative Compliance Provisions Lack Clarity and Should: 1) Require That Mitigation be Tied to Water Supply; and 2) Distinguish Between Groundwater Replenishment Facilities that Convey Runoff From the Project Site (Hydrologically Connected) and Those that Are Hydrologically Unconnected From the Project Site	Environmental Groups	The Board agrees that ground water replenishment should be tied to an aquifer used for water or potential water supply. The Board does not feel there is a need to distinguish between projects that are and are not hydrologically connected as the Order specifies the water quality benefits have to be equivalent to those achieved by onsite retention and the land uses in projects that are not hydrologically connected have to be similar to the land uses where the development project is located.	Language will be included to specify ground water replenishment projects must be tied to aquifers used for water supply or with the potential to be used for water supply based on Beneficial Use designations.
Biofiltration	The Draft Permit's Alternative Compliance Provisions for Biofiltration are Insufficiently Protective of Water Quality and Would Improperly Allow Use Of	Environmental Groups	The Order requires a demonstration of infeasibility of onsite retention before on site biofiltration can be utilized. To compensate for the difference in pollutant removal a 1.5 multiplier, identical to the Ventura County MS4 Order, is used for the storm water design	None

	Biofiltration Off-site, Even Where On-Site Retention or Biofiltration were Feasible		volume to compensate for the differences in pollutant removal. Detailed biofiltration design specifications were included to maximize the performance of these systems.	
General	The Draft Permit's Local Ordinance Equivalence Provision Creates a Self Regulatory Scheme in Violation of the Clean Water Act	Environmental Groups	The Order was revised to specify criteria for the LID Ordinance.	Revision made.
Agency and Public Oversight	The Draft MS4 Permit Illegally Eliminates Essential Agency and Public Oversight	Environmental Groups	The Order allows the Executive Officer to approve certain documents but part of the Executive Officer approval process includes public review of the draft document(s) prior to approval.	None
SUSMP	The tentative order replaces the Development Planning/SUSMP with Planning and Land Development Program. However, the SUSMP is mandated through a precedent-setting WQO issued by the State Board.	Baldwin Park, Carson, Covina, Duarte, Lawndale, Pico Rivera, San Gabriel, West Covina	The program has been renamed but the current Planning and Development Program is an evolution of the SUSMP and is entirely based on the current SUSMP program. The storm water quality design volume sizing and core objectives are the same.	None
Retrofitting	Retrofitting existing developments through the Land Use Development Program is not authorized under federal stormwater regulations.	Baldwin Park, Carson, Covina, Duarte, Lawndale, Pico Rivera, Pomona, San Gabriel, West Covina, Ventura Countywide Stormwater Quality Management Program	The Permit requires the inventorying of suitable facilities for retrofitting opportunities, and allows retrofitting of existing development as an alternative within the Planning and Land Development section under certain circumstances, but does not mandate retrofitting anywhere in the Order.	None
Retrofitting	The Permit states: "Each Permittee shall develop an inventory of retrofitting opportunities that meets the requirements of this Part VI.8.D... The goals of the existing	LA Permit Group, Ventura Countywide Stormwater Quality Management Program	The Permit requires the inventorying of suitable facilities for retrofitting opportunities, but does not mandate retrofitting anywhere in the Order.	None

	<p>development retrofitting inventory are to address the impacts of existing development through regional or sub-regional retrofit projects that reduce the discharges of storm water pollutants into the MS4 and prevent discharges from the MS4 from causing or contributing to a violation of water quality standards."</p> <p>This process would require land acquisition, a feasibility analysis, no impacts to existing infrastructure, proper soils, and support of various interested stakeholders. Additionally, if a property or area is being developed/redeveloped, retrofitting the site for water quality purposes makes sense, but not for an area where no development/redevelopment is planned. Finally, the LID provisions have already included provisions for off-site mitigation, in which we recommend that regional water quality projects be considered in lieu of local-scale water quality projects that will prove difficult to upkeep, maintain, and replace, let alone have existing sites evaluated as feasible. For these reasons, this requirement should be removed.</p>			
Local Ordinance Equivalence	The requirement of 180 days for the "Local Ordinance Equivalence" may be difficult to	LA Permit Group	The Permit requires a Permittee to submit documentation that their current LID Ordinance is equivalent to what is required in the Permit. This does	None

	be met due to the typical processing and public review period for changes to local municipal codes. Consider revising this provision to require immediate start of this effort instead.		not require any changes to local municipal ordinances.	
General	The stated objective of mimicking the predevelopment water balance is not consistent with the requirement that the entire design storm be managed onsite.	LA Permit Group, Peninsula Cities	There have been studies that show that runoff in undeveloped areas may not occur until over an inch of rainfall is received even in areas with clay soils. The SWDQV retention value (85 th percentile 24 hour storm) is within the range where many studies have shown no runoff would occur in a undeveloped area.	None
Hillside homes	Recommend that the special requirements for hillside homes be relocated to a different location within VI.D.6 such as under Vi.D.6.a.i. as item (8) so that such projects will not be included in the list of new development/ redevelopment projects requiring strict numerical volume runoff reduction.	Peninsula Cities	The section of the Permit does not specify strict numerical volume reduction as the current Order does. As such, the inclusion of hillside homes within the section is appropriate.	None
Economic feasibility	Economic considerations in evaluating and selecting LID BMPs for control of the stormwater quality design volume are absent. We continue to emphasize including economic feasibility in selecting onsite or offsite LID BMPs, and include economic feasibility as part of the LID BMP feasibility determination process along with technical feasibility. The maximum extent practicable (MEP) standard expressly	BIASC/CICWQ	The Federal Clean Water Act requires controls to reduce the discharge of pollutants to the maximum extent practicable. Implementing regulations at 40 CFR section 122.26(d)(2)(iv) identify the core elements of a storm water management program, including measures to reduce the discharge of pollutants from MS4s that receive discharges from areas of new development and significant redevelopment (subsection (iv)(A)(2)). Low impact development (LID) has been shown to be a cost-effective way to reduce runoff volume and to reduce pollutants discharged to the MS4 from these areas. There are a broad range of LID BMPs from which to select, based on a hierarchy of options depending on site conditions, along with options for off-site mitigation under certain circumstances where	None

	includes the recognition of economic considerations when evaluating stormwater management options.		site conditions render LID BMPs technically infeasible. The flexibility provided in the draft tentative order along with the availability of alternative compliance approaches where there is a demonstration of technical infeasibility allows selection of BMPs that will be cost-effective.	
VI.D.6.c.i.(4) Planning and Land Development Program/New Development/Redevelopment Project Performance Criteria	"Maximum potential for rainwater harvest and use" is not defined in this order. Feasibility criteria for rainwater harvest and use is not included in this order. Feasibility assessments should be based on the 30 day site demand including landscape irrigation and indoor nonpotable use where allowed, and should allow application of harvested water to landscaping area in excess of the agronomic demand as long as runoff is not created.	Contech	Comment noted. The Regional Water Board elected to set no specific criteria for maximum potential, and to instead allow developers to develop justification for green roofs and rainfall harvesting to the full extent at the discretion of the Permittees. An example is the Spec sheet for rainwater harvesting in the Ventura County TGM, which states "Rainwater harvesting is not required to be used if the available demands do not meet the volume required for 80% capture using a 72 hour drawdown time." A comparable requirement would be the SWQDv with a 72 hour drawdown.	None
VI.D.6.c.v.(1).(c).ii.1 Rainwater Harvesting	Modify existing text: "The site infiltrates or retains via rainwater harvest and use at least the runoff from the 2-year, 24-hour storm event..." Additional text in red font should be added to reflect a wider range of runoff reduction BMPs that may be employed.	Contech	Rainwater harvesting would not be anticipated to be used to achieve the capture of the 2 year 24 hour storm for an area this large.	None
VI.D.6.c.ii.(2) Storm Water Management Program Minimum Control	A statement such as "the project applicant must demonstrate that the project cannot reliably retain 100 percent of the SWQDv onsite, even with the maximum application of green roofs and	BIASC/CICWQ	Comment noted. The Regional Water Board elected to set no specific criteria for maximum potential, and to instead allow developers to develop justification for green roofs and rainfall harvesting to the full extent at the discretion of the Permittees.	None

<p>Measures, 6. Planning and Land Development Program, c. New Development/Redevelopment Project Performance Criteria, ii. Alternative Compliance for Technical Infeasibility or Opportunity for Regional Groundwater Replenishment</p>	<p>rainwater harvest and use....” is unclear given existing permit language, and is inconsistent with precedential language established in the Ventura County MS4 permit.</p>		<p>No permit adopted by the Board, including the Ventura County MS4 permit, is precedential. Each permit is case-specific.</p>	
<p>Section VI.D.6.a .i.6 Purpose</p>	<p>Drainage of a structural BMP within 96 hours at the end of rainfall may not be practical. The drainage of the BMP will most likely be used for landscape irrigation. Within 96 hours at the end of a rain event, landscape irrigation may not be needed. Other measures, such as recirculation, should be considered to minimize the potential for the breeding of vectors.</p>	<p>Malibu</p>	<p>The 96 hour drawdown time is consistent with guidance from the Vector Control agencies. Though other mosquito abatement techniques may be practicable, the Board decided to incorporate the most protective strategy.</p>	<p>None</p>
<p>New Development</p>	<p>Item (4) (page 70): this item should be eliminated. It forces an evaluation of green roofs for every project, whether or not a green roof is proposed.</p>	<p>Downey, Norwalk, Vernon</p>	<p>The purpose of this provision is to ensure dischargers look at all means to retain storm water on site before utilizing alternative compliance options.</p>	<p>None</p>
<p>VI.D.6.c.iv.(1)</p>	<p>This is an extremely onerous</p>	<p>BIASC/CICWQ</p>	<p>Federal regulations require that MS4 permittees</p>	<p>None</p>

<p>through (3) Storm Water Management Program Minimum Control Measures, 6. Planning and Land Development Program, c. New Development/Redevelopment Project Performance Criteria, iv. Water Quality Mitigation Criteria (1-3)</p>	<p>requirement and questionably legal; we recommend striking much of this requirement and providing an alternative method of demonstrating that treatment control BMPs have been selected to adequately address pollutants of concern.</p> <p>During the July 9, 2012 staff workshop, staff clarified that the purpose of water quality mitigation criteria (Section 4.D.6.c.iv) is to guide the selection of treatment BMPs for projects that have been approved for offsite mitigation or groundwater replenishment to address the pollutants of concern for the project site. As written, however, this section appears create unnecessary legal liability in the treatment BMP selection process, as it requires that treatment BMPs be selected to achieve receiving water limitations and WQBELS at downstream MS4 outfalls.</p>		<p>develop, implement, and enforce controls to reduce the discharge of pollutants from MS4s that receive discharges from areas of new development and significant redevelopment. (40 CFR § 122.26(d)(2)(iv)(A)(2).) Treatment BMP benchmarks were established from the median effluent values of the top 6 performing BMPs per pollutants. The inclusion of the benchmarks is to ensure appropriate BMPs are selected for pollutants expected to be discharged from a completed project.</p>	
<p>Section VI.D.6d.iv.1.c.i. Tracking, Inspection, and Enforcement of Post-Construction BMPs</p>	<p>Please clarify if the “Post-construction BMP Maintenance Inspection checklist” is an item that will be provided by the Regional Board or if is an item that the permittees are required to develop.</p>	<p>Malibu</p>	<p>The intent of the requirement is to have Permittees develop a checklist that is appropriate for their use. Clarifying language will be added.</p>	<p>Revision made.</p>

	<p>For post-construction BMPs operated and maintained by parties other than the Permittee, the Permittee shall require annual reports by the other parties demonstrating proper maintenance and operations.</p> <p>Concern- This requirement appears to be superfluous and without substance in addition to lacking the technical details required to be included in such a report.</p> <p>Proposed Solution- Monitor and regulate the BMP maintenance through the Commercial/Industrial Inspection Program.</p>	<p>Vernon</p>	<p>The proper maintenance of BMPs is crucial to their continued performance and the Board’s intent is to ensure post construction BMPs are properly maintained. The permit has been revised to require the documentation of maintenance conducted and eliminate the annual report requirement for non-Permittees and instead require the documentation of BMP inspection and maintenance.</p>	<p>Revisions made.</p>
<p>Section VI.D.6.c.ii.(2)(f) Alternative compliance for Technical Infeasibility or Opportunity for Regional Ground Water Replenishment</p>	<p>This section should include any dewatering wells that are used to reduce the geotechnical hazards. The City has several dewatering wells located throughout the City that are used to stabilize the hillsides and slopes and to mitigate landslide threats. These dewatering wells are used to avoid rising groundwater that could cause landslides and other geotechnical hazards. Allowing the replenishment of groundwater in these locations would increase the amount of dewatering beyond what the existing dewatering pumps can produce. This will cause instability in the existing geotechnical hazard area. Lastly,</p>	<p>Malibu</p>	<p>The example noted in the comment is captured within the technical infeasibility criteria as a location with potential geotechnical hazards. A site in such a location could utilize onsite biofiltration or retain the volume of runoff not captured onsite at an offsite location.</p>	<p>None</p>

	the groundwater would not be replenished in this area since the groundwater pumps would collect the water.			
Construction Requirements	<p>The requirement that offsite projects must be completed within 4 years of the certificate of occupancy for the first project that contributed funds toward the construction of the offsite project is an impossible expectation for offsite projects of any significant scale. Municipalities cannot implement retrofit-type offsite projects without a significant portion of the construction funds in hand or committed, so this requirement will effectively limit the scale and effectiveness of offsite projects to those that are very small and can be funded within a narrow window of time to allow for design and construction of the retrofit project within the 4-year window.</p> <p>Recommend that this requirement be changed to “within 4 years of the certificate of occupancy for the <i>last</i> project that contributed funds toward the construction of the offsite project”</p>	South Bay Cities	<p>The Permit states;</p> <p>“Offsite projects shall be completed as soon as possible, and at the latest, within 4 years of the certificate of occupancy for the first project that contributed funds toward the construction of the offsite project, <u>unless a longer period is otherwise authorized by the Executive Officer of the Regional Water Board.</u>”</p> <p>A longer implementation time is allowed with Executive Officer approval.</p>	None
Practicability of LID and treatment control standards	The Draft Permit and Fact Sheet fail to show any considered analysis and evaluation of the MEP factors with respect to the many new, and more stringent low impact development (LID)	BILD	The Board disagrees. As detailed in the Fact Sheet, although not required, the Board has considered the factors in section 13241 of the California Water Code, including costs. In that consideration, the Board specifically “recognizes that Permittees will incur costs in implementing this Order above and beyond the costs	

	<p>and treatment control standards and requirements proposed for inclusion in the permit. It does not appear that cost, technical feasibility or public acceptance of any those new standards or requirements have been analyzed to assure that they are consistent with treatment control to the MEP.</p>		<p>from the Permittees’ prior permit. Such costs will be incurred in complying with the post-construction, hydromodification, Low Impact Development, TMDL, and monitoring and reporting requirements of this Order.” (Fact Sheet, Section XIV.) Based on the economic considerations, the Board has provided permittees a significant amount of flexibility to choose how to implement the permit. The permit allows permittees the flexibility to address critical water quality priorities, but aims to do so in a focused and cost-effective manner while maintaining the level of water quality protection mandated by the Clean Water Act. For example, the inclusion of a watershed management program option allows Permittees to submit a plan, either individually or in collaboration with other Permittees, for Regional Water Board Executive Officer approval that would allow for actions to be prioritized based on specific watershed needs. In the end, it is up to the permittees to determine the effective BMPs and measures needed to comply with this Order. Permittees can choose to implement the least expensive measures that are effective in meeting the requirements of this Order.</p> <p>Further, there is an element of cost consideration inherent in the MEP standard. While the term “maximum extent practicable” is not specifically defined in the Clean Water Act or its implementing regulations, USEPA, courts, and the State Water Board have addressed what constitutes MEP. MEP is not a one-size fits all approach. Rather, MEP is an evolving, flexible, and advancing concept, which considers practicability. This includes technical and economic practicability. Compliance with the MEP standard involves applying BMPs that are effective in reducing or eliminating the discharge of pollutants in storm water to receiving waters. BMP development is a dynamic process, and the menu of BMPs may require changes over time as experience is gained and/or the</p>	
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			<p>state of the science and art progresses. MEP is the cumulative effect of implementing, evaluating, and making corresponding changes to a variety of technically appropriate and economically practicable BMPs, ensuring that the most appropriate controls are implemented in the most effective manner. The State Water Board has held that “MEP requires permittees to choose effective BMPs, and to reject applicable BMPs only where other effective BMPs will serve the same purpose, the BMPs would not be technically feasible, or the costs would be prohibitive.” (State Water Board Order WQ 2000-11.)</p> <p>The commenter has provided no evidence that the LID and treatment control standards and requirements are not technically or economically impracticable.</p>	
<p>Planning and Land Development Program</p>	<p>CEQA preempts the Planning and Land Development Program requirements. The assumption is that all runoff from a wide class of New Development and Redevelopment projects will result in significant adverse impacts on the environment, namely, water quality, and that such impacts must, therefore, be mitigated by those particular mitigation measures as mandated in the Permit. The permit dictates the terms and results of environmental review, without regard for CEQA's provisions, and eliminates a local governmental agency's discretion to consider and approve feasible alternatives or mitigation measures — even if alternative measures may have a lesser effect on the environment.</p>	<p>Signal Hill</p>	<p>The Planning and Land Development Program requirements are included in the permit pursuant to federal law. (See 40 C.F.R. § 122.26(d)(2)(iv)(A).) Any conflicting state laws, including CEQA, are preempted by federal law. (See <i>Silkwood v. Kerr-McGee Corp.</i> (1984) 464 U.S. 238, 248 [“state law is still preempted . . . where the state law stands as an obstacle of the full purposes and objectives of Congress.”]; see also Wat. Code, §§ 13370, 13377.) Applying CEQA would stand as “an obstacle to the accomplishment of the full purposes and objectives of [the federal law].” (Silkwood, 464 at p. 248.)</p> <p>In addition, local land use planning must be consistent with general statewide laws. (<i>County of Los Angeles v. California State Water Resources Control Board</i> (2006) 143 Cal.App.4th 985, 1003.) Article 11, section 7, of the California Constitution states that a county or city may not enact laws that conflict with general laws. The Porter-Cologne Water Quality Control Act contains the California Legislature’s finding that water quality is a matter of state-wide concern, requiring a statewide program administered at a regional level. (See, e.g., Wat. Code, § 13000; see also generally</p>	<p>None</p>

			<p><i>Southern California Edison v. State Water Resources Control Board</i> (1981) 116 Cal.App.3d 751, 758.) Section 101 of the CWA has a companion policy statement, where Congress found that water quality is a matter of federal concern. The regional boards are explicitly granted the authority to issue NPDES permit to implement the Clean Water Act. The Clean Water Act requires that permits include controls to reduce pollutant discharge in areas of new development and significant redevelopment. The mandates in the permit such as the Planning and Land Development Program requirements result from those express legislative provisions.</p> <p>In addition, the permit does not restrict or control local land-use decision-making authority. Rather, the permit requires permittees to fulfill Clean Water Act requirements and protect water quality in their land use decisions. The requirements in the permit allow for flexibility in compliance options to the extent allowable under the Clean Water Act. Further, environmental regulation is not land use regulation, and therefore does not infringe upon local authority over land use decisions. (<i>California Coastal Commission v. Granite Rock</i> (1987) 480 U.S. 572; see also <i>In re Los Angeles County Municipal Storm Water Permit Litigation</i> (Sup. Ct. Los Angeles County, March 24, 2005, Case No. BS 080548), Statement of Decision from Phase I Trial on Petitions for Writ of Mandate, pp. 13-16.)</p> <p>Moreover, CEQA does not grant substantive regulatory authority to governmental agencies. Section 15040(b) & (e) state that “CEQA does not grant an agency new powers independent of the powers granted to the agency by other laws... [t]he exercise of discretionary powers for environmental protection shall be consistent with express or implied limitations provided by other laws.” CEQA also explicitly states that none of its provisions “is a limitation or restriction on the power or</p>	
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			<p>authority of any public agency in the enforcement or administration of any provision of law which it is specifically permitted or required to enforce or administer ...” (Cal. Pub. Res. Code § 21174.) Therefore, CEQA cannot preempt the Board’s authority to include permit terms that are protective of water quality.</p> <p>Lastly, Public Resources Code section 21003 demonstrates that the Legislature intended CEQA to be an environmental review process, not the only one. Given the powers vested in the Regional Water Board to implement water quality control and coordination under the Porter-Cologne Act, the Board can require additional environmental reviews consistent with this authority and it can specify and require action to ameliorate the impacts of polluted runoff without offending CEQA. (See, e.g., Pub. Resources Code, § 21174; <i>Bozung v. Local Agency Formation Com.</i> (1975) 13 Cal.3d 263, 274.)</p>	
<p>Biofiltration</p>	<p>The hierarchy of LID provisions relegates to a relatively inferior status the use of bio-filtration employed as a means to mimic the natural flow of diffuse storm water while benefitting water quality. If the Board were to formalize the final permit with such a hierarchy, it would run afoul of thousands of years of legal policy that favors the maintenance or mimicking of natural water flows. As proposed, the requirements would impose a generally-applicable presumptive requirement that almost no storm water (from a design storm) should be allowed to flow from a parcel that has been developed or</p>	<p>BILD</p>	<p>The capture of a given volume of storm water runoff with the pollutants associated with it is more easily quantified, is subject to far less uncertainty than the treatment of storm water runoff, and is subject to fewer design variables than using treatment processes to remove pollutants from storm water runoff. The natural flow and common enemy doctrines referenced by the commenter are common law doctrines that govern the rights and obligations of adjacent landowners with respect to the flow of diffuse surface water across their properties. The permit does not purport to alter the applicable rule in California regarding liability as between property owners with respect to diffuse surface flows. Rather, the permit’s retention requirements are based on the requirements of the federal Clean Water Act and its central goal to restore and maintain the natural integrity of waters. The minimization of effective impervious area and the on-site retention requirements are both important tools</p>	<p>None</p>

	<p>redeveloped. The Board should reconsider and reject the universal retention doctrine.</p>		<p>for restoring and maintaining the chemical, biological, and physical integrity of surface waters.</p> <p>Numerous studies have shown that development results in an increase in storm water runoff from a project site with a resulting increase in runoff discharging across property lines. The intent of the on-site retention requirement incorporated in the permit is to mitigate a significant portion of the increased flow resulting from new development and redevelopment and reduce pollutant discharge from a site as well as mitigate hydromodification impacts downstream. USEPA promotes the use of LID in areas where development has already occurred because of its value in reducing runoff volumes, pollutant loadings, and the overall impacts of existing development on the affected receiving waters.</p>	
<p>New Development/ Redevelopment Performance Criteria</p>	<p>The Regional Board and State Board have the power to regulate new construction through the Construction General Permit (“CGP”). It seems unreasonable and arguably unlawful for the Board to effectively embellish the CGP’s requirements (albeit outside of the CGP) by mandating, through the MS4 permit, that MS4 permittees must impose new and different requirements on new development and construction. By doing so, the Board would deprive many landowners and others who might be interested in the CGP requirements of reasonably fair notice and an opportunity to comment on matters affecting their rights and the use of their property. In</p>	<p>BILD</p>	<p>Federal regulations require that MS4 permits include a program to reduce pollutants in run-off from construction sites. (See 40 C.F.R. § 122.26, subdivision (d)(2)(iv)(D) [permittees shall describe a “program to implement and maintain structural and non-structural best management practices to reduce pollutants in storm water runoff from construction sites to the municipal storm sewer system.”]. MS4 permits must include controls for construction activities, even if construction sites are regulated under a general permit. This permit is consistent with the CGP. The CGP only covers construction sites of one acre or more. The Development and Construction Program requirements in this permit are intended, in part, to fill the gap between smaller sites not covered by the CGP. Further, Finding I.A.4. of the CGP specifically states that it does not preempt or supersede the authority of local storm water management agencies, such as the Regional Water Board, “to prohibit, restrict, or control storm water discharges to municipal separate storm sewer systems or other watercourses within their jurisdictions.” This permit also does not add to the</p>	<p>None</p>

	<p>addition, the Board should not exercise its discretion in ways that infringe upon constitutionally and statutorily protected municipal powers to regulate land uses within their boundaries.</p>		<p>requirements of the CGP. The CGP is a statewide permit applicable to construction activities of a particular magnitude. In contrast, the requirements of the MS4 permit are specifically designed to address threats to water quality from storm water runoff, including that from construction activity at all construction sites in jurisdictions subject to this permit. Thus, the permit’s Development and Construction Program is consistent with the CGP in that they regulate different entities and are not in conflict.</p> <p>A similar argument to that presented by the commenter was considered and rejected by the Los Angeles Superior Court during the litigation on the 2001 permit, Order No. 01-182. The Court upheld the requirements pertaining to the development and construction program and found that the CGP was not in conflict with such requirements. (See <i>In re Los Angeles County Municipal Storm Water Permit Litigation</i> (Sup. Ct. Los Angeles County, March 24, 2005, Case No. BS 080548), Statement of Decision from Phase II Trial on Petitions for Writ of Mandate, pp. 37-41.)</p> <p>Further, landowners and other members of the public have had an opportunity to comment on this permit both in written and oral form.</p> <p>The permit also does not restrict, control, or otherwise infringe upon local land use authority. Rather, the permit requires permittees to fulfill Clean Water Act requirements and protect water quality in their land use decisions. The requirements in the permit allow for flexibility in compliance options to the extent allowable under the Clean Water Act. Further, environmental regulation is not land use regulation, and therefore does not infringe upon local authority over land use decisions. (<i>California Coastal Commission v. Granite Rock</i> (1987) 480 U.S. 572; see also <i>In re Los Angeles County Municipal Storm Water Permit Litigation</i> (Sup.</p>	
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			<p>Ct. Los Angeles County, March 24, 2005, Case No. BS 080548), Statement of Decision from Phase I Trial on Petitions for Writ of Mandate, pp. 13-16.)</p> <p>Lastly, local land use planning must be consistent with general statewide laws. (<i>County of Los Angeles v. California State Water Resources Control Board</i> (2006) 143 Cal.App.4th 985, 1003.) Article 11, section 7, of the California Constitution states that a county or city may not enact laws that conflict with general laws. The Porter-Cologne Water Quality Control Act contains the California Legislature’s finding that water quality is a matter of state-wide concern, requiring a statewide program administered at a regional level. (See, e.g., Wat. Code, § 13000; see also generally <i>Southern California Edison v. State Water Resources Control Board</i> (1981) 116 Cal.App.3d 751, 758.) Section 101 of the CWA has a companion policy statement, where Congress found that water quality is a matter of federal concern. The regional boards are explicitly granted the authority to issue NPDES permit to implement the Clean Water Act. The Clean Water Act requires that permits include controls to reduce pollutant in run-off from construction sites. The mandates in the permit such as the Development and Construction Program requirements result from those express legislative provisions.</p>	
<p>New Development/ Redevelopment Performance Criteria/ Water Quality Mitigation Criteria</p>	<p>Part VI.D.6.c.iv (1)(b) - The requirement not to cause or contribute to exceedance of a water quality standard is not contained in the CWA, which only requires Permittees to effectively prevent non-stormwater discharges to the MS4 and to take steps to the MEP to address pollutants in discharges from the MS4. Additionally, more clarity is needed on the</p>	<p>County of Los Angeles</p>	<p>This comment is addressed in the responses to comments on Receiving Water Limitations provisions. The reference to a Permittee’s downstream outfall means the outfall(s) downstream of the project location from which discharges from the project would enter receiving waters.</p>	<p>None</p>

	meaning of “Permittee’s downstream MS4 outfall.”			
Definitions				
Definitions A-1 to A-9	These terms are in the definitions section. They appear to be terms used for wastewater permit requirements and are not used anywhere in this permit language. They are Average Monthly Effluent Limitation (AMEL), Daily Discharge, Dilution Credit, Instantaneous Maximum Effluent Limitation, Instantaneous Minimum Effluent Limitation, Maximum Daily Effluent Limitation (MDEL), Mixing Zone, and Satellite Collection System. Please delete these terms from the Attachment A.	City of Los Angeles	In an effort to ensure consistent permit development across the State, the State Water Board encourages each Regional Water Board to follow a standardized template for all NPDES permits. In developing this tentative order, the Regional Water Board’s standardized permit template was used, which includes a set of standard definitions that are included in all NPDES permits. The Regional Water Board agrees that several terms are not applicable, and those terms will be removed in the final order.	Revisions made.
Definition A-4 Green Roof	Green roof means a roof that is partially or completely covered with vegetation and a growing medium, planted over a waterproofing membrane. It may also include additional layers such as a root barrier, subdrain, and irrigation system.	City of Los Angeles	Comment noted. This definition was taken in part from Order No. R2-2011-0083 and other state and federal sources.	None
Definition A-5 Infiltration	Downward movement of water through soil in-situ soils or amended soils. For consistency, if examples are going to be given, each BMP definition should be given examples. Recommend removing the 2 nd line of the current definition. Also provide definition for uncontaminated ground water infiltration that refers to the introduction of	City of Los Angeles	Comments noted. The Board has revised the Green Roof definition included in the Tentative. As noted by the commenter, uncontaminated ground water infiltration is already defined in the permit in Part III.A.	None

	groundwater to the MS4 system as defined on page 27 of the Order.			
Definition A-7	<p>Planter boxes and other high flow treatment BMPs</p> <p>Planter boxes should not be grouped with the high flow treatment BMPs. In the City of Los Angeles, we have been requiring planter boxes to have a flow-through velocity less than 5 inch/hour rate. Please define “high flow treatment BMPs” and a specific flow through rate. Also please accept planter boxes as one of the biofiltration options even if they do not allow for incidental infiltration. In the city of Los Angeles, planter boxes are one of the most common BMPs. This was reaffirmed with the recently implemented LID requirements that involved participation with Heal the Bay and other environmental advocacy organizations. Removing planter boxes as an option will make the land Development and Planning Requirements unattainable.</p>	City of Los Angeles	The definition of Planter Boxes in Attachment A – Definitions has been modified to reflect the requested change and also to reference the design criteria contained in Attachment H.	<p>Proposed Order Change: Attachment A – Definitions.</p> <p>Planter boxes and other flow-through treatment BMPs To comply with the biofiltration requirements in part VI.D.6.c.iii(1) of this Order, Planter Boxes must be designed in accordance with the biofiltration criteria contained in Attachment H.</p>
Definition A-8 Rainfall harvest and use	Definition should not limit capture only from the roof and it should be open to capture runoff from the entire site if feasible.	City of Los Angeles	Comment noted. It standard practice that rainfall harvesting be exclusive to the capture of rain water from roofs. The Board agrees that harvesting from other parts of a project area other than a roof is acceptable.	Language was revised to allow rainfall capture throughout the project.

Annual Report	The Permit requires: “Each Permittee shall provide in their annual report to the Regional Water Board a list of mitigation project descriptions and pollutant and flow reduction analyses (compiled from design specifications submitted by project applicants and approved by the Permittee(s)) comparing the expected aggregate results of alternative compliance projects to the results that would otherwise have been achieved by retaining on site the SWQDv.” It is not clear what the “mitigation project descriptions” includes. Please clarify if this means all planning project applications, only those for which construction is completed or something else. Further, is this only meant for offsite projects or groundwater replenishment projects?	Malibu	The mitigation project description refers to offsite mitigation and groundwater replenishment projects implemented in lieu of onsite retention.	None
New Development	VI.D.6.b.i.(1)(c) 68 Why is a strip mall being regulated but not other types of malls or commercial facilities? Revise (c) as follows, “Commercial malls 10,000 square feet or more surface area”	Torrance	The Board agrees the inclusion of the term “strip” is superfluous; the permit has been revised accordingly.	Revision made.
New Development	Please provide a more effective reference for the USEPA guidance document on Green Streets than a website link by referencing exact document title,	South Bay Cities, Torrance	The link when opened provides all the requested information. A copy of the document is also included in the Administrative Record for the permit.	None

	authors, year of publication and USEPA document ID number			
New Development	VI.D.6.b.i.(1) Cities can not change development requirements after a Developer obtains Planning Approval, without the Developer incurring financial hardship that could block the Development. Revise the projects subject to conditioning and approval to “prior to Planning approval of the project(s)...”	City of Los Angeles, Torrance	The Board agrees, and will include the language from the current Ventura County MS4 Order.	Language was revised.
Annual Reporting	Exclude single-family residential projects from annual reporting requirements i.e. from the requirements at VI.D.6.d.iv. (d), and (e). The Permittees would still maintain a record in the database of the project in accordance with (a) so that when future modifications to the project site occur via building permit, the permittee can verify the condition of the structural BMP as part of subsequent redevelopment projects on the property and ensure that the effectiveness is maintained over the long term without annual reporting by the homeowner	Peninsula Cities	The Board agrees and will exempt single family residences.	Language was revised.
Attachment A; Definitions	Attachment A; Definitions: Definition edits needed for: ii. Biofiltration iii. Bioretention viii. Infiltration xi. Planter boxes and other flow-through treatment BMPs	BIASC/CICWQ	The use of the word “bioinfiltration was an error. Biofiltration is the correct term. The Order is revised accordingly. All other portions of this comment are noted. Terms were included in the Order with the correct and exact definitions intended. A definition was included for the following:	On the 3 rd line of the definition for Biofiltration changed “bioinfiltration” to “biofiltration” (facilities

	<p>Definitions needed for: 1) Bioinfiltration 2) Project 3) Total Project Area</p> <p>Some definitions provided are inconsistent with established knowledge and practice in infiltration and biotreatment system designs. In addition, we recommend including definitions for “bioinfiltration”, “project” and “total project area.”</p> <p>There are established definitions in the Ventura County MS4 Permit Technical Guidance Manual that clearly and succinctly define essential permit terms and conditions, in addition to those in the staff proposed MCM.</p>		<p>Project: development, redevelopment, and land disturbing activities. The term is not limited to “project” as defined under CEQA (Reference: California Public Resources Code § 21065).</p>	<p>designed for partial infiltration of runoff and partial biotreatment)” Definition also included for “Project”</p>
<p>Attachment A; Definitions Predevelopment</p>	<p>We recommend that the term “pre-development water balance” be eliminated or exceptions to this goal be explicitly recognized. This may be a reasonable goal in some cases, but may be more restrictive than is required to protect surface water and groundwater quality. For example, if recharge is needed, then why is it necessary to require water balance matching when it is actually desirable to increase recharge compared to natural conditions? Additionally it may be cost prohibitive to attempt to manage the entire water balance.</p>	<p>BIASC/CICWQ</p>	<p>The Board concurs and will replace “pre-development water balance” with “pre-development hydrology.” Draft Order is revised accordingly.</p> <p>Remaining portion of comment is noted.</p>	<p>Revised Part D.6.a.i(3) 4th line to replace “predevelopment water balance” with “pre-development hydrology”.</p>

	<p>We recommend combining (7) (a) and (b) into a single statement indicating LID BMP selection preference and deleting the reference to “bioretention.”</p> <p>County, Western and Southern Riverside County, and San Bernardino County recognize the use of LID BMPs as a means to potentially mimic “pre-development hydrology”.</p>			
<p>Attachment A Biofiltration</p>	<p>Bioswales must be removed from the definition of biofiltration.</p> <p>Bioswales, as defined in Appendix A of this order, are a "flow through" treatment system designed to convey a water quality flow rate, not to capture a runoff volume. Swales of this type are not as effective as media filters for TSS, nutrient or trash removal and may actually increase concentrations of bacteria and nutrients in treated water if conventional landscape maintenance practices are followed. They are less effective than planter boxes for all conventional pollutants. If swales are designed to infiltrate water through an amended soil layer instead of conveying it over a vegetated surface, they are much more effective. However, such designs are more accurately termed bioretention and could be</p>	<p>Contech</p>	<p>Comments noted. Bioswale is defined in Attachment A as “A LID BMP consisting of a shallow channel lined with grass or other dense, low-growing vegetation. Bioswales are designed to collect storm water runoff and to achieve a uniform sheet flow through the dense vegetation for a period of several minutes.”</p> <p>This definition is congruent with the biofiltration description of reducing storm water by intercepting rainfall on vegetative canopy, and through evapotranspiration, incidental infiltration, and filtration.</p>	<p>None</p>

	<p>designed following Appendix H. Currently, there is no mention of swales in Appendix H.</p>			
<p>Attachment A Biofiltration</p>	<p>Planter boxes should be included in the definition of Biofiltration.</p> <p>Biofilters without underdrains, or planter boxes are more effective for all conventional stormwater pollutants than bioswales. Including bioswales but excluding planter boxes prioritizes the use of less effective BMPs which is indefensible. The key difference is that planter boxes filter runoff through at least 18" of amended soils prior to discharge. Infiltration and filtration through soil is incidental in bioswales. The primary treatment mechanism is settling and filtration through vegetation as water flows to the outlet of the swale. Since swales can only be used where infiltration is infeasible, native soil infiltration rates will be >0.15 inches per hour and infiltration rates will be negligible. Planter boxes must follow the Attachment H soil criteria and are designed to facilitate substantial evapotranspiration. Swales do not require amended soils and will provide relatively great evapotranspiration rates, but will also require much higher irrigation rates to maintain the robust vegetation necessary for</p>	<p>Contech</p>	<p>The definition of Planter Boxes in Attachment A – Definitions has been modified to reflect the requested change and also to reference the design criteria contained in Attachment H.</p>	<p>Order Change: Attachment A – Definitions.</p> <p>Planter boxes and other flow-through treatment BMPs To comply with the biofiltration requirements in part VI.D.6.c.iii(1) of this Order, Planter Boxes must be designed in accordance with the biofiltration criteria contained in Attachment H.</p>

	treatment.			
Attachment H-Bioretenion / Biofiltration Design Criteria	<p>Part 5 indicates the following:</p> <p>Waterproof barriers may not be placed on the bottom of the biofiltration unit, as this would prevent incidental infiltration which is critical to meeting the required pollutant load reduction.</p> <p>Concern- Part VI.D.6.c.ii.(2) specifies that alternative compliance, such as biofiltration, can be allowed if technical infeasibility demonstrates the project is situated in a (d) Brownfield development sites, (e) location where pollutant mobilization is a documented concern.</p> <p>The purpose of this alternative compliance option is to avoid the creation of a groundwater contamination catastrophe; however, if a waterproof barrier on the bottom of a biofiltration unit is restricted in a location where pollutant mobilization is a documented concern, the Tentative Permit potentially will be creating an even greater environmental problem for generations to come.</p> <p>Proposed Solution- Revise the Bioretention / Biofiltration Design Criteria to allow</p>	Vernon	<p>Without the incidental infiltration that is required in the On-site biofiltration section, even sizing the biofiltration 1.5 times the size of infiltration BMPs will not result in the same pollutant or volume reduction. The Board does realize that there are some unique circumstances such as the example you listed and has language in the Order that allows alternative biofiltration design criteria to be used with Executive Officer approval. Though that language was in the Tentative, the Board has repeated the language within other sections to make it more apparent.</p> <p>The Order has language to allow alternative biofiltration design criteria. The Order has been revised to make the provision more apparent.</p>	Language revised.

	waterproof barriers to be placed on the bottom of biofiltration units.			
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California Regional Water Quality Control Board, Los Angeles Region
Los Angeles County MS4 Permit
Response to Comments on the Tentative Order
TOTAL MAXIMUM DAILY LOADS (GENERAL) MATRIX

Section/Topic	Comment Summary	Commenter(s)	Response	Change Made
<i>General</i>				
Incorporation of TMDLs	For MS4 permits, it is not required that TMDLs be incorporated “consistent with the assumptions and requirements” of the TMDL WLAs. An NPDES permit is required to comply with 40 C.F.R. § 122.44(d)(1)(vii)(B) only “when applicable.” MS4 permits are not required to comply with water quality standards. The entirety of 40 C.F.R. § 122.44(d)(1), including § 122.44(d)(1)(vii)(B), is thus not applicable. This result is derived from the plain language of 33 U.S.C. § 1342(p)(3) as well as by the holding in <i>Defenders of Wildlife</i> . Therefore, there is no requirement that WQBELs or TMDL WLAs be include in the MS4 permit. Such WLAs may instead be expressed in the form of BMPs.	County of Los Angeles (Comment 10)	NPDES permits are intended to support the objective of the federal Clean Water Act “to restore and maintain the chemical, physical, and biological integrity of the Nation's waters” (Clean Water Act section 101(a)). Water quality standards, which are the basis for the receiving water limitations in the Order, are the foundation for achieving this objective. To ensure that discharges do not cause or contribute to exceedances of water quality standards, RWL provisions are included in all NPDES permits issued pursuant to CWA section 402. Further, Clean Water Act section 402(p)(3)(B)(iii) requires permits for discharges from municipal storm sewers to “require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design, and engineering methods, <i>and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.</i> ” [Emphasis added.] In its Phase I Stormwater Regulations, Final Rule, USEPA elaborated on these requirements, stating that, “permits for discharges from municipal separate storm sewer systems must require controls to reduce the discharge of pollutants to the maximum extent practicable, and where necessary water quality-based controls” (see 55 Fed. Reg. 47990, 47994 (Nov. 16, 1990)). USEPA reiterated in its Phase II Stormwater Regulations, Final Rule, that MS4 “permit conditions must provide for attainment of applicable water quality standards (including designated uses), allocations of pollutant loads established by a TMDL, and timing requirements for implementation of a TMDL.” USEPA Region IX has also affirmed the agency’s position that MS4	None

			<p>discharges must meet water quality standards in a series of comment letters on MS4 permits issued by various California regional water boards. (Phase II Stormwater Regulations, Final Rule, 64 Fed. Reg. 68722, 68737 (addressing small MS4s). USEPA has also set forth in guidance regarding MS4 permits, that such permits must require compliance with applicable TMDLs to meet water quality standards. (See "Revisions to the November 22, 2002 Memorandum 'Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Requirements Based on Those WLAs.'" USEPA Office of Water, Nov. 10, 2010.)</p> <p>The Clean Water Act thus provides the Regional Board, to the same extent as the Administrator of USEPA, the discretion to determine what controls are appropriate to protect water quality and achieve the objective of the Act. (See <i>Defenders of Wildlife v. Browner</i> (1999) 191 F.3d 1159, 1166.) Both the State Board and Regional Board have previously concluded that discharges from the MS4 contain pollutants that have the reasonable potential to cause or contribute to excursion above water quality standards. As such, RWLs are included in the permit to ensure that individual and collective discharges from the MS4 do not cause or contribute to exceedances of water quality standards necessary to protect the beneficial uses of the receiving waters. Compliance with the WLAs established in TMDLs is necessary to achieve compliance with water quality standards.</p> <p>In recognition of the purpose of the NPDES program in achieving the objective of the Clean Water Act and utilizing the authority provided by CWA section 402(p)(3)(B)(iii), and based on USEPA statements and guidance, the State Board has determined that MS4 permits must include compliance with water quality standards. (See State Water Board Order Nos. WQ 91-03, WQ 98-01, WQ 99-05, and WQ 2001-15.) Accordingly, the provisions contained in 40 CFR section 122.44, subdivision (d), are applicable to MS4 permits.</p>	
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<p>Application of TMDLs to receiving waters as opposed to the MS4.</p>	<p>The Permit and its attachments are ambiguous, with respect to the application of TMDLs to receiving waters as opposed to the MS4. Recommendation Add as a final sentence to Part VI.E.1.a. the following: “The TMDLs apply to the receiving waters identified in Attachments L-R.”</p>	<p>County of Los Angeles (Comment 116)</p>	<p>There is no ambiguity. The TMDLs apply to the water bodies that are the subject of the TMDLs. The WLAs apply to MS4 discharges to the water bodies that are the subject of the TMDLs.</p>	<p>None</p>
<p>General</p>	<p>WLAs should be incorporated using a BMP-based approach that includes an iterative approach to attain the WLAs and provides flexibility to the Permittees to address the complexities of addressing multiple TMDLs within a watershed.</p>	<p>LA Permit Group, Cities of Inglewood and Claremont</p>	<p>The tentative order provides the opportunity for Permittees to demonstrate compliance with interim effluent limitations through a BMP based approach (i.e., development and implementation of a WMP), where Permittees have provided a reasonable assurance through quantitative analysis that the control measures/BMPs to be implemented will achieve the interim effluent limitations in accordance with the schedule provided in the tentative order. The previously adopted TMDL implementation schedules, including the deadlines to achieve interim milestones, support an iterative approach to attaining the final TMDL requirements and allow Permittees the flexibility to address multiple TMDLs within the watershed. These implementation schedules typically range from 18 to 25 years for storm water related requirements. It is premature to consider application of this BMP based compliance demonstration option to the final effluent limitations and final receiving water limitations – most of which have deadlines outside the term of the tentative order. More data is needed to validate assumptions and model results regarding the linkage among BMP implementation, the quality of MS4 discharges, and receiving water quality to have the necessary assurance that these BMPs will ultimately achieve the final effluent limitations. The Regional Board will evaluate the effectiveness of this BMP-based compliance determination approach in ensuring that interim effluent limitations for storm water are achieved during this permit term. If this approach is effective, the tentative order has been revised to include a new cause for</p>	<p>New provision in Part VI.A.7.a.</p>

			<p>modification in Part VI.A.7.a. to consider whether it would be appropriate to allow a similar approach for demonstrating compliance with final effluent limitations applicable to storm water. During the term of the tentative order, there are very few final compliance deadlines for effluent limitations applicable to storm water, or receiving water limitations applicable during wet weather conditions. Most deadlines during the term of the tentative order are for <i>interim</i> effluent limitations <i>applicable to storm water</i>, or for <i>final</i> effluent limitations <i>applicable to non-storm water discharges</i> and final dry weather receiving water limitations. For effluent limitations applicable to non-storm water discharges, a BMP-based approach to compliance demonstration is provided in the sense that a Permittee may demonstrate that it has no non-storm water discharge to the receiving water. This may be demonstrated, for example, by providing documentation of the operation and maintenance of a low-flow diversion. This is consistent with the federal Clean Water Act requirement that non-storm water MS4 discharges must be effectively prohibited.</p>	
Incorporation of TMDLs	<p>The proposed method of incorporating TMDL waste load allocations (WLAs) as outlined in the Draft Order does not effectively allow for addressing this phased method of implementing TMDLs; nor does it recognize the time, effort and complexities involved in addressing MS4 discharges; and places municipalities into non-compliance risk.</p>	LA Permit Group	<p>The proposed method of incorporating TMDL WLAs is consistent with the previously adopted TMDL implementations schedules, which explicitly allow for phased implementation over extended periods in recognition of the time, effort and complexities involved in addressing MS4 discharges.</p>	None
Incorporation of TMDLs	<p>The Permit should recognize the articulated goal of many of the TMDLs to be adaptive management documents, using the iterative approach to achieve the goals, and consider</p>	LA Permit Group	<p>The tentative order provides flexibility through the TMDL compliance schedules and the WMPs to select approaches to address the TMDLs using an adaptive management approach.</p>	None

	<p>the challenges of trying to address the non-point nature of stormwater. As such, it is imperative to have flexibility in selecting an approach to address the TMDLs and the time frame by which to implement the approach.</p>			
<p>Incorporation of TMDLs</p>	<p>We would like to thank Board staff for providing the opportunity to submit an implementation schedule and BMPs in context of a Watershed Management Plan to attain EPA TMDL WLAs. The same flexibility is also necessary to address Regional Board adopted TMDLs.</p>	<p>LA Permit Group</p>	<p>The process to develop a program of implementation for WLAs contained in USEPA established TMDLs, as provided for in this permit, mimics that followed by the Regional Board when adopting TMDLs and programs for their implementation through the basin plan amendment process by providing the opportunity for Permittees to evaluate implementation strategies and the time required to carry out these implementation measures and use this as the basis for compliance schedules to achieve the WLAs in the USEPA established TMDLs in the permit.</p> <p>The Regional Board’s decision as to how to express permit conditions for USEPA established TMDLs is based on an analysis of several specific facts and circumstances surrounding these TMDLs and their incorporation into the tentative order. First, unlike Regional Board adopted TMDLs, these TMDLs do not include a program of implementation. Second, since these TMDLs do not include implementation programs, none have undergone a comprehensive evaluation by the Regional Board of implementation strategies or an evaluation of the time required to fully implement control measures to achieve the final WLAs. Third, the majority of these TMDLs were established by the USEPA recently – from 2010 to present – and permittees have had limited time to plan for and implement control measures to be able to achieve immediate compliance with the WLAs. For these reasons, the Regional Board has determined that numeric effluent limitations for these USEPA established TMDLs are infeasible at the present time. The Regional Board may revisit this decision within the</p>	<p>None</p>

			<p>term of the tentative order or in a future permit, as more information is developed to support the inclusion of numeric effluent limitations. However, in the meantime, Permittees are required to implement BMPs that will be effective in ultimately achieving the numeric WLAs.</p> <p>These facts and circumstances surrounding USEPA established TMDLs do not apply to Regional Board adopted TMDLs. This notwithstanding, as previously described, the tentative order allows Permittees to demonstrate compliance with interim effluent limitations derived from Regional Board adopted TMDLs using a BMP-based approach through development and implementation of a WMP.</p>	
<p>Incorporation of TMDLs</p>	<p>The LA Permit Group would submit that the Regional Board staff is making two policy decisions that have massive financial impacts to the region (studies show in the range of billions of dollars) with regards to incorporating TMDLs into a stormwater NPDES Permit:</p> <ul style="list-style-type: none"> • The inclusion of numeric effluent limitations for final TMDL WLAs. • The use of time schedule orders to address Regional Board adopted TMDLs for which the compliance points have passed. 	<p>LA Permit Group</p>	<p>The Regional Board recognizes that implementation measures to achieve TMDL requirements come at a cost to permittees. These costs of compliance have been considered by the Regional Board during the adoption of the TMDLs. In recognition of these implementation costs, the Regional Board has provided implementation schedules to achieve storm water requirements generally ranging from 18 to 25 years. Pursuant to 40 CFR section 122.44(d)(1)(vii)(B), NPDES permits must include requirements consistent with the assumptions and requirements of any available waste load allocations established in TMDLs. However, the manner in which the effluent limitations for final TMDL WLAs are expressed in the tentative order, in and of itself, does not create the financial impact.</p> <p>The provision in the tentative order that allows permittees to request time schedule orders to come into compliance with final effluent limitations for which final compliance deadlines have passed also does not in and of itself create a financial impact. Instead, where a Permittee provides justification for additional time, a time schedule order will ameliorate the impact by providing additional time to implement the control measures necessary to achieve compliance, which will decrease the financial impact by allowing Permittees to spread out the cost of implementation.</p>	<p>None</p>

<p>Numeric limits</p>	<p>The inclusion of numeric limits is not required and results in contradictions and compliance inconsistencies with the rest of the Permit requirements.</p>	<p>LA Permit Group</p>	<p>Water quality based effluent limitations are required for point source discharges that have the reasonable potential to cause or contribute to an excursion of water quality standards and technology based effluent limitations or standards are not sufficient to achieve water quality standards. Where a WLA has been assigned to a discharge in a TMDL, it is concluded that there is reasonable potential for the discharge to cause or contribute to an excursion of water quality standards. Additionally, the Regional Board finds that for waters identified as impaired and for which WLAs have been assigned to MS4 discharges, that technology based effluent limitations or standards, in the form of storm water management programs (SWMPs) required pursuant to 40 CFR section 122.26(d)(2)(iv) have not been sufficient to achieve water quality standards.</p> <p>Further, the inclusion of numeric effluent limitations is authorized by Clean Water Act section 402(p)(3)(B)(iii). This requirement gives USEPA or the State permitting authority discretion to determine what permit conditions are necessary to control pollutants. (See <i>Defenders of Wildlife v. Browner</i> (1999) 191 F.3d 1159, 1166). In its Phase I Stormwater Regulations, Final Rule, USEPA elaborated on these requirements, stating that, “permits for discharges from municipal separate storm sewer systems must require controls to reduce the discharge of pollutants to the maximum extent practicable, and where necessary water quality-based controls” (see 55 Fed. Reg. 47990, 47994 (Nov. 16, 1990)). Water quality based effluent limitations must be consistent with the assumptions and requirements of available WLAs. WQBELs may be expressed narratively or numerically. USEPA recommends the use of numeric effluent limitations where feasible in MS4 permits in order to clarify permit requirements and improve accountability during the permit term. While BMPs are central to MS4 permits, permit requirements may only rely upon BMP based limitations in lieu of numeric water quality based effluent limitations if: (1) the BMPs are adequate to achieve water quality standards, and (2) numeric effluent</p>	<p>None</p>
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			<p>limitations are infeasible. There is insufficient data and information available at this time on the prospective implementation of BMPs throughout the watersheds in Los Angeles County to provide the Regional Board reasonable assurance that the BMPs would be sufficient to achieve the numeric WQBELs and/or water quality standards. Regarding the feasibility of numeric effluent limitations, the Regional Board concludes that numeric WQBELs are feasible. (See response, below, for more explanation regarding the Regional Board’s finding that numeric effluent limitations are feasible.) It is not clear from the comment how the incorporation of numeric effluent limitations results in contradictions or compliance inconsistencies with other requirements in the tentative order.</p>	
<p>BMPs</p>	<p>Under 40 CFR Section 122.44 (k), the Regional Board may impose BMPs for control of storm water discharges in lieu of numeric effluent limitations when numeric limits are infeasible. It states that best management practices may be used to control or abate the discharge of pollutants when numeric effluent limitations are infeasible. In 2006, the State Board convened Blue Ribbon Panel made recommendations to the State Water Resources Control Board concluding that it was not feasible to incorporate numeric limits into Permits to regulate storm water, and at best, there could be some action level to focus on problematic drainage sheds . Very little has changed in the technology and the feasibility of</p>	<p>LA Permit Group; Port of Stockton; Cities of: Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, San Gabriel and West Covina</p>	<p>40 CFR section 122.44(k) provides that BMPs may be used as permit requirements in lieu of numeric effluent limitations only when numeric effluent limitations are found to be infeasible. The Regional Board concludes that numeric WQBELs are feasible. While a lack of data may have hampered the development of numeric WQBELs for MS4 discharges in earlier permit terms, in the last decade, 33 TMDLs have been developed for water bodies in Los Angeles County in which WLAs are assigned to MS4 discharges. In each case, part of the development process entailed analyzing pollutant sources and allocating loads using empirical relationships or quantitative models. As a result, it is possible to use these numeric WLAs to derive numeric WQBELs for MS4 discharges.</p> <p>The State Water Board, in Order WQ 2006-0012 (Boeing), has made clear that “infeasibility” refers to “the ability or propriety of establishing” numeric limits, as opposed to the feasibility of compliance. USEPA also testified before this Board during the hearing on October 4-5, 2012 that the feasibility of numeric effluent limitations refers to the ability to calculate the numeric effluent limitations not to the feasibility of compliance with such limitations.</p>	<p>None</p>

	<p>controlling storm water pollutants since 2006. Regional Board staff commented during the workshop that staff have evaluated data and have determined numeric effluent limitations are now feasible. However, no information refuting the Blue Ribbon Panel report recommendations has been provided that demonstrates how the appropriateness of using strict numeric limits was determined and why these limits are considered feasible now even though historically both EPA and the State have made findings that developing numeric limits was likely to be infeasible.</p>		<p>With regard to the Blue Ribbon Panel Report, the Panel focused on concerns about unpredictability of BMP performance, which might suggest that calculating technology based effluent limitations is not feasible but does not impact the Regional Board’s ability to calculate water quality based effluent limitations on the basis of the prevailing water quality standards and available WLAs.</p> <p>The Panel also raised concerns that “effluent limit approaches usually focus only on conventional water quality constituents that may not be solely or at all responsible for the receiving water beneficial use impairments in urban receiving waters.” However, the numeric effluent limitations proposed in the tentative order are derived directly from TMDL WLAs that have been developed to address exceedances of water quality standards that have a direct link to beneficial use impairments.</p> <p>The Panel also stated that, “monitoring for enforcement of numeric effluent limits would also be challenging.” However, the tentative order addresses the challenge of monitoring through a variety of approaches, including representative outfall monitoring (based on subwatersheds and land use), TMDL compliance monitoring per approved compliance monitoring plans, and BMP-based compliance demonstration for interim WQBELs. Finally, it is important to note that the Panel made no conclusions or recommendations with regard to the feasibility of numeric effluent limitations applicable to non-storm water discharges from MS4s, which must be effectively prohibited if they are a source of pollutants.</p>	
<p>BMPs</p>	<p>Given the discretion available to Regional Board staff and the variability among the TMDLs with respect to understanding of the pollutant sources, confidence in the technical analysis, and availability of control measures sufficient to address the pollutant targets, it</p>	<p>LA Permit Group</p>	<p>The Regional Board only has the discretion to rely upon BMPs in lieu of numeric effluent limitations when numeric limits are infeasible and if there is reasonable assurance that the BMPs will achieve the numeric WQBELs and/or water quality standards. In the case of the numeric WQBELs proposed in the tentative order, reasonable assurance has not yet been demonstrated. The tentative order requires that the WMP plans include an analysis to demonstrate that proposed BMPs will achieve final WQBELs, and requires a regular evaluation of</p>	<p>New provision added to causes for modification in Part VI.A.7.a</p>

	<p>is critical to use non-numeric water quality based effluent limitations for final WLAs in this Permit.</p>		<p>the effectiveness of the BMPs to validate the initial analysis. The Regional Board may consider whether it would be appropriate to allow an action based approach for demonstrating compliance with the final WQBELs applicable to storm water prior to final compliance deadlines if the approach is effective in achieving compliance with interim WQBELs (see revisions to Part VI.A.7.a.).</p> <p>The implementation timeframes provided to achieve TMDLs were adopted by the Regional Board in consideration of the time necessary to further identify sources and identify and implement the most effective control measures. Additionally, the storm water program has advanced significantly nationally and regionally and, for most if not all pollutants addressed by TMDLs, there are well understood control measures available, including structural BMPs to reduce the amount of storm water runoff and treat pollutants in runoff, operational source control, and pollution prevention (also referred to as true source control).</p>	
<p>Incorporation of TMDLs</p>	<p>However, unless final WLAs are also expressed in this Permit as action-based water quality based effluent limitations, and if instead strict numeric limits are required for final WLAs, then, at the specified final compliance date, no matter how much the Permittee has done, no matter how much money has been spent, no matter how close to complying with the numeric values, no matter what other sources outside the Permittees' control have been identified and quantified, and no matter what other information has been developed and submitted to the Regional Board, the Permittee</p>	<p>LA Permit Group</p>	<p>The Regional Board considers a number of factors when addressing non-compliance with permit provisions, including efforts of the Permittee to comply, the severity of the non-compliance, and the contribution of other dischargers. The tentative order specifically states that each Permittee is only responsible for discharges from the MS4 for which it is owner and/or operator. A Permittee may demonstrate that its discharge did not cause or contribute to an exceedance of an applicable WQBEL or receiving water limitation in any of several ways. See tentative order, Part VI.E.2.b.v.</p> <p>Additionally, where new information is provided that merits a reconsideration of permit requirements, the permit includes a reopener provision, which may be invoked at any time.</p>	<p>None</p>

	<p>will be considered out of compliance with the Permit requirements. Furthermore, because of the structure established in this Permit, the Regional Board staff will have to consider all Permittees in this situation as being out of compliance with the Permit provisions if the strict numeric limits have not been met, regardless of the actions taken previously. This approach is inconsistent with the goals of good public policy, fair enforcement, fiscal responsibility and holding Permittees responsible only for discharges over which they have individual control.</p>			
<p>Incorporation of TMDLs</p>	<p>Because the majority of the TMDLs have not been incorporated into Permit requirements until now, MS4 Permittees have been put in the position of trying to comply with TMDL requirements without knowing how compliance with those TMDLs would be determined and without knowing when or if promised considerations of modifications to the TMDL would occur. So Permittees would be expected to be in immediate compliance with new Permit provisions irrespective of most precedent,</p>	<p>LA Permit Group</p>	<p>There is only a small subset of the 33 TMDLs for which final compliance deadlines have passed, and only three of these are significant in terms of MS4 discharges. In all three cases, the final deadlines that have passed are related to non-storm water discharges from the MS4, not storm water discharges. The CWA requires that non-storm water discharges through the MS4 be effectively prohibited to the extent that they are a source of pollutants to receiving waters. Furthermore, these final deadlines occurred between 3½ to 6 years ago in most cases. Additionally, Permittees have been on notice since 2006 regarding the manner in which these TMDL requirements would be incorporated into the permit. The LA County MS4 Permit was reopened in 2006 and again in 2007 to include these very requirements.</p> <p>Further, a TSO would provide additional time to comply, where justified, rather than requiring immediate compliance with the final WQBELs.</p>	<p>None</p>

	guidance regarding incorporation of TMDLs into MS4 Permits, and irrespective of what actions Permittees have taken to try and meet the TMDL requirements. This is neither fair nor consistent as requesting a TSO would place a Permittee in immediate non-compliance with the Permit and expose the Permittee to risk of third party lawsuits.			
Incorporation of TMDLs	Final compliance with TMDL Permit conditions should not occur prior to these additional TMDL reconsiderations. Additionally, the Permit should reflect any modifications to the TMDL schedules made through the reopener process, either through a delay in the issuance of the Permit until the modified TMDLs become effective, or by using its discretion to establish a specific compliance process for these TMDLs in the Permit. Providing for compliance with these TMDLs through implementation of BMPs defined in the watershed management plans as we have requested for all other TMDLs is a feasible, fair and consistent way to achieve this goal.	LA Permit Group, Inglewood	The Regional Board cannot delay incorporation of provisions in the permit consistent with the assumptions and requirements of the available WLAs from TMDLs that are in effect. Further, compliance schedules must be consistent with those established in the TMDL. However, the permit includes a provision that allows the Board to reopen and modify the permit to incorporate provisions as a result of future amendments to the Basin Plan, such as the reconsideration of a TMDL, including implementation schedules. See Part VI.A.7.a.iv.	Revisions to Part VI.A.7.a.
Final WLAs	<ul style="list-style-type: none"> Provide a provision which requires that a TMDL be reconsidered in light of information that was not 	LA Permit Group, La Verne, Pomona	The tentative order is not the place to provide a provision requiring that a TMDL is reconsidered in light of new information. In many cases, the Regional Board in the basin plan amendment itself has included one or more opportunities	Revision to Part VI.A.7.a

	<p>available when the TMDL was developed before the final WLAs become effective. Whenever the reconsideration has been completed, the Permit should be reopened to make changes to any wasteload allocation, time schedules, and other pertinent information.</p>		<p>to reconsider a TMDL based on new information. Additionally, as TMDLs are a part of the Basin Plan, the Regional Board may at any time reconsider aspects of it if warranted. The tentative order includes a provision that the order may be re-opened for a variety of causes including to incorporate provisions as a result of future amendments to the Basin Plan, such as reconsideration of a TMDL. See tentative order, Part VI.A.7.a.iv. Further, the permit has been revised to include a provision in Part VI.A.7.a under causes for modification to support a reopener of the permit to include provisions or modifications to WQBELs in Part VI.E. and Attachments L-R of the permit prior to the final compliance deadlines, if practicable, that would allow an action-based, BMP compliance demonstration approach with regard to final WQBELs for storm water discharges based on the Regional Board’s review of relevant research on storm water quality and control technologies and the effectiveness of Watershed Management Programs in achieving interim WQBELs.</p>	
<p>Final WLAs for State-adopted TMDLs</p>	<p>The County is concerned that final WLAs for State-adopted TMDLs have been incorporated as numeric effluent limitations that apply at the point of discharge from the MS4 and, where applicable, as receiving water limitations. The more appropriate approach is to incorporate interim and final WLAs as BMP-based effluent limitations defined as TMDL Control Measures required in the Watershed Management Program. State that the implementation of the BMPs using an iterative process will place the Permittee into compliance with the MS4 Permit.</p>	<p>LA Permit Group, La Verne, Pomona, Santa Clarita (Comment 47, 48, 56), City of Los Angeles (Comment 11)</p>	<p>As previously discussed, the tentative order allows a BMP-based approach to compliance demonstration for interim WQBELs. Based on an evaluation of the effectiveness of this approach during the coming permit term, the Regional Board will consider whether to extend this approach to final WQBELs.</p>	<p>Revision to Part VI.A.7.a</p>

<p>Compliance</p>	<ul style="list-style-type: none"> • Provide for four compliance options for both interim and final WLAs: <ul style="list-style-type: none"> o Implement Actions/BMPs consistent with Watershed Management Program o Compliance at the outfall (end of pipe) o Compliance in the receiving water (river, creek, ocean) o No direct discharges 	<p>LA Permit Group, La Verne, Pomona, Inglewood,</p>	<p>The tentative order provides the four suggested compliance options for interim WQBELs, and provides three of the four options for final WQBELs.</p>	<p>None</p>
<p>Adaptive management approach</p>	<ul style="list-style-type: none"> • Allow for the adaptive management approach to be utilized for TMDL compliance, consistent with the timelines identified in the Watershed Management Programs. 	<p>LA Permit Group, Pomona, La Verne</p>	<p>The adaptive management approach is accommodated in the tentative order, consistent with the timelines previously adopted by the Regional Board as part of each TMDL.</p>	<p>None</p>
<p>General</p>	<p>No reasonable potential analysis has been performed – even though USEPA guidance requires it as part of documenting the calculation of WQBELs in the NPDES permit’s fact sheet</p>	<p>Cities of: Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, San Gabriel and West Covina</p>	<p>Through the development of the TMDLs being incorporated in the tentative order, the Regional Board determined that discharges of pollutants from the Los Angeles County MS4 cause, have the reasonable potential to cause, or contribute to an excursion above water quality standards. Therefore, WLA were assigned to Los Angeles County MS4 discharges during the adoption of the TMDLs.</p> <p>At the permitting stage, the Regional Board evaluates reasonable potential through a qualitative assessment process consistent with the USEPA NPDES Permit Writers Manual, Chapter 6, section 6.3.3. As part of this process, the Permit Writers Manual reiterates that where there is a pollutant with a WLA from a TMDL, a permit writer must develop WQBELs or other permit requirements consistent with the assumptions and requirements of any WLA that has been assigned to the discharge as part of an approved TMDL per 40 CFR section 122.44(d)(1)(vii)(B). Therefore, WQBELs have been included in the tentative order for those pollutants with TMDL WLAs</p>	<p>None</p>

			<p>assigned to the Permittees' MS4 discharges. The analysis contained in the TMDLs and the fact sheet for the tentative order provides the support and rationale for the determination that discharges from the MS4 have the reasonable potential to cause or contribute to excursion above water quality standards in the receiving water.</p> <p>The Permit Writers Manual further specifies that even without a TMDL, a permitting authority could, at its own discretion, determine that WQBELs are needed for any pollutant associated with impairment of a waterbody. A permitting authority might also determine that WQBELs are required for specific pollutants for all facilities that exhibit certain operational or discharge characteristics. (See also CA § 402(p)(3)B(iii); <i>Defenders of Wildlife v. Browner</i> (1999) 191 F.3d 1159, 1166; State Water Board Order No. WQ 2001-15.)</p>	
Incorporation of TMDLs	Placing Regional Board/State Board TMDLs into the MS4 would result in serious consequences for permittees. For one thing, permittees subject to TMDLs that contain an implementation schedule with compliance dates for interim waste load allocations that have not been met, based on Los Angeles County mass emissions station or other data (e.g., from the Coordinated Monitoring Plan for the Los Angeles River Metals TMDL), will be in automatic non-compliance once the MS4 permit takes effect.	Cities of: Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, San Gabriel and West Covina	<p>The permit must require compliance with any applicable TMDLs and associated implementation programs (CWA §§ 303(d), 402(p)(3)(B)(iii); Cal. Water Code §§ 13263, 13377). See also "Revisions to the November 22, 2002 Memorandum 'Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Requirements Based on Those WLAs.'" USEPA Office of Water, Nov. 10, 2010; and <i>Defenders of Wildlife v. Browner</i> (1999) 191 F.3d 1159, 1166 and State Water Board Order Nos. WQ 98-01, 99-05, and 2001-15.</p> <p>Further, the draft tentative order allows permittees to demonstrate compliance with interim WLAs in any one of several ways as identified in Part VI.E.2.a.-d.</p>	None
TSOs	The tentative order proposes a safeguard in this event: coverage under a time schedule order (TSO). Essentially, a TSO	Cities of: Baldwin Park, Carson, Covina, Duarte, Glendora,	The Regional Board is required to adopt and implement TMDLs through the MS4 permit, where Permittees' MS4 discharges are a source of the impairment. Each TMDL sets a compliance deadline as required by federal law. In some	None

	<p>is an enforcement action authorized under Porter-Cologne, the State’s water code. The problem is that the Regional Board, at its discretion, could issue a clean-up and abatement order that could link permittees in the Dominguez Channel, Los Angeles River, and San Gabriel River Watersheds to the remediation of the Los Angeles and Long Beach Harbors which are currently CERCLA sites (caused by DDT, pesticides, metals, which are considered toxics, and other pollutants). Furthermore, the TSO, which is a State enforcement action, will not help with respect to a federal violation because of preemption. An exceedance will expose subject permittees to third party litigation under the Clean Water Act. NRDC would be able to take the matter straight to federal court.</p>	<p>Irwindale, Lawndale, Pico Rivera, San Gabriel and West Covina</p>	<p>cases, the compliance deadline has passed. Unlike state law, the federal Clean Water Act allows for citizen suits. The Regional Board cannot change federal law to avoid the possibility of citizen suits, but can only use the authority it has under state law to provide additional time for compliance. The Regional Board cannot avoid its responsibility to protect water quality in order to protect dischargers from citizen suits. The tentative permit provides various approaches to provide time for compliance. The Water Code provides for the use of time schedule orders where justified to allow additional time to comply with such deadlines, and would also protect permittees from imposition of mandatory minimum penalties. The tentative permit sets forth the process the Regional Board will use in considering the issuance of time schedule orders.</p> <p>The adoption of a time schedule order is not the same as a cleanup and abatement order. The tentative permit addresses the use of time schedule orders to address compliance with TMDLs where deadlines have passed. The Regional Board does not intend to use the tentative permit to address cleanup of the Harbors; the tentative permit is intended to address ongoing discharge of pollutants into the MS4.</p>	
<p>TMDL implementation plans</p>	<p>The Regional Board has no legal authority under the Clean Water Act to incorporate implementation plans, schedules, or monitoring requirements into the MS4 permit. CWA §402(p)(B)(iii) simply states that controls are required to reduce the discharge of pollutants to the maximum extent practicable, including</p>	<p>Cities of: Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, San Gabriel and West Covina</p>	<p>TMDLs are adopted by the Regional Water Board pursuant to CWA section 303(d) and CWC sections 13240 and 13242. TMDL implementation programs consist of a description of the nature of actions that are necessary to achieve the WLAs (and LAs), a time schedule for the actions to be taken, and a description of the monitoring and reporting to be undertaken to determine compliance with the WLAs. Because TMDLs and their programs of implementation are adopted through the basin plan amendment process in California, the TMDL implementation program contained in a regional water board’s basin plan becomes a regulation upon approval by the State of</p>	<p>None</p>

	<p>management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants. The application of this provision is limited to: (1) the implementation of BMPs specified in a stormwater management plan appropriated through the six core programs; and (2) outfall monitoring. Monitoring, as mentioned earlier, is limited to outfall and ambient monitoring. Ambient monitoring, which is receiving water-based, has been assumed by the Regional Board and is funded through a stormwater ambient monitoring program (SWAMP) surcharge on the annual MS4 permit fee. Federal stormwater regulations mention nothing about TMDL implementation plans and schedules in an MS4 permit.</p>		<p>California Office of Administrative Law. All permits must implement the applicable water quality control plan (i.e. Basin Plan), including any applicable TMDL implementation programs (CWA §§ 303(d), 402(p)(3)(B)(iii); Cal. Water Code §§ 13263, 13377). These Basin Plan provisions thus become the applicable regulations that authorize an MS4 permit to include compliance schedules to achieve effluent limitations derived from TMDL WLAs. It is unclear whether the commenters understand that the TMDL implementation programs are the basis for the compliance schedules and, without the TMDL implementation program, permittees would be required to comply with final WQBELs immediately. Further, USEPA has stated that, “[w]here a TMDL has been established and there is an accompanying implementation plan that provides a schedule for an MS4 to implement the TMDL, the permitting authority [<i>in this case, the Regional Water Board</i>] should consider the schedule as it decides whether and how to establish enforceable interim requirements and interim dates in the permit” (USEPA November 12, 2010 TMDL Memo).</p> <p>Clean Water Act section 402(p)(3)(B)(iii) requires permits for discharges from municipal storm sewers to “require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design, and engineering methods, <i>and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.</i>” [Emphasis added.] The Clean Water Act provides the Regional Board, to the same extent as the Administrator of USEPA, the discretion to determine what controls are appropriate to protect water quality and achieve the objectives of the Clean Water Act. (See <i>Defenders of Wildlife v. Browner</i> (1999) 191 F.3d 1159, 1166.) As explained in the tentative permit, compliance with the WLAs established in TMDLs is necessary to achieve compliance with water quality standards.</p> <p>USEPA has set forth in guidance regarding MS4 permits, that such</p>	
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			<p>permits must require compliance with applicable TMDLs to meet water quality standards. See “Revisions to the November 22, 2002 Memorandum ‘Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Requirements Based on Those WLAs.’” USEPA Office of Water, Nov. 10, 2010. NPDES permits must include WQBELs or other permit requirements consistent with the assumptions and requirements of any WLA that has been assigned to the discharge as part of an approved TMDL per 40 CFR section 122.44(d)(1)(vii)(B). These WLA requirements include schedules for achieving the WLAs and monitoring and reporting to determine compliance. USEPA has stated that, “[w]here a TMDL has been established and there is an accompanying implementation plan that provides a schedule for an MS4 to implement the TMDL, the permitting authority [<i>in this case, the Regional Water Board</i>] should consider the schedule as it decides whether and how to establish enforceable interim requirements and interim dates in the permit” (USEPA November 12, 2010 TMDL Memo).</p> <p>Both receiving water monitoring and outfall (i.e. discharge or effluent) monitoring are well established in NPDES permits generally, and are supported by myriad federal authorities (See CWA section 308(a); 40 CFR sections 122.26(d)(2)(i)(F) and (d)(2)(iii)(D), 122.41(h), (j)-(l), 122.42(c), 122.44(i), and 122.48), as well as USEPA’s Part 2 MS4 permit application guide (USEPA 833-B-92-002).</p> <p>Also, it should be noted that the Water Board’s ambient monitoring program, SWAMP, stands for <i>Surface Water Ambient Monitoring Program</i>, not Storm Water Ambient Monitoring Program.</p>	
TMDL implementation plans	In fact, the Regional Board/State Board TMDL implementation plans, implementation schedules, and monitoring should be voided and prevented from being	Cities of: Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico	The Monitoring and Reporting Program (MRP) of the tentative order requires both receiving water monitoring and outfall (i.e. discharge or effluent) monitoring. The commenters are confusing ambient monitoring of waters to determine the <i>natural concentration</i> of water quality constituents with in-stream or receiving water monitoring to determine the <i>impact</i>	None

	<p>placed into the MS4 permit because (1) they set compliance determinant in the receiving water instead of the outfall; and (2) although the TMDL monitoring program requirements specify ambient monitoring that is to be performed by MS4 permittees, including Caltrans, the Regional Board has approved plans that treat wet weather monitoring as ambient monitoring, even though they are mutually exclusive. The Clean Water Act definition of ambient monitoring is the:</p> <p>Natural concentration of water quality constituents prior to mixing of either point or nonpoint source load of contaminants. Reference ambient concentration is used to indicate the concentration of a chemical that will not cause adverse impact to human health.</p>	<p>Rivera, San Gabriel and West Covina</p>	<p><i>of discharges</i> on receiving water quality. Both receiving water and outfall monitoring are well established in NPDES permits generally and are supported by myriad federal authorities (See CWA section 308(a); 40 CFR sections 122.26(d)(2)(i)(F) and (d)(2)(iii)(D), 122.41(h), (j)-(l), 122.42(c), 122.44(i), and 122.48), USEPA’s Part 2 MS4 permit application guide (USEPA 833-B-92-002).</p> <p>In the case of MS4 discharges, to accurately determine the impact of these discharges on receiving water quality, it is necessary to monitor during both wet weather and dry weather conditions, i.e., during conditions when <i>non-storm water discharges from the MS4</i> may impact receiving waters and during conditions when <i>storm water discharges from the MS4</i> may impact receiving waters.</p>	
<p>TMDL implementation plans</p>	<p>Even if it were legally permissible for these TMDL elements to be incorporated into the MS4 permit, no permittee could be placed into a state of non-compliance because the legitimate compliance point is in the outfall. Because no outfall monitoring has occurred, no violation could arise and, therefore, there would be no</p>	<p>Cities of: Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, San Gabriel and West Covina</p>	<p>NPDES permits must include WQBELs or other permit requirements consistent with the assumptions and requirements of any WLA that has been assigned to the discharge as part of an approved TMDL per 40 CFR section 122.44(d)(1)(vii)(B). These WLA requirements include schedules for achieving the WLAs and monitoring and reporting to determine compliance. If the implementation schedules adopted as part of the TMDLs were not included in the tentative order, Permittees would be required to comply immediately with the final WQBELs. The implementation schedules in essence allow Permittees to use an iterative approach, within a certain timeframe, to achieve</p>	<p>None</p>

	<p>need for a TSO.</p> <p>Recommended Correction: Eliminate requiring TMDL implementation plans, schedules, and monitoring to be incorporated into the tentative order</p>		<p>the final WQBELs.</p> <p>Outfall monitoring is not the only mechanism for determining compliance. The tentative order allows Permittees to demonstrate compliance at an outfall, jurisdictional boundary, or in the receiving water. These compliance points are consistent with the assumptions of the TMDLs. Compliance determination may be based on outfall monitoring data or other data and information that links the MS4 discharge to an excursion of receiving water limitations.</p>	
General	<p>CWC 13178 only deals with bacteria - please clarify how this applies to any other pollutant</p>	<p>City of Santa Clarita (Comment 49)</p>	<p>The tentative order recognizes that Cal. Water Code section 13178 is only applicable to bacteria source identification. The tentative order has been revised to allow the use of other accepted source identification protocols for exceedances of receiving water limitations or WQBELs for pollutants other than bacteria.</p>	<p>Revision to Order, Part VI.E.2.b.v.(3)</p>
General	<p>The City of Signal Hill also requests that Provision VI.E.2.d.i be modified by adding a subsection that specifies that a Permittee shall be considered in compliance with an interim water quality-based effluent limitation and/or interim receiving water limitations for pollutant(s) associated with a specific TMDL while preparing a Watershed Management Program Plan in accordance with Provision VI.E.3 and Provision VI.C. We further request that interim implementation schedules be placed in the permit for EPA-established TMDLs covered by Provision VI.E.3 to provide protection from third-party</p>	<p>City of Signal Hill</p>	<p>As discussed in response to other comments, Compliance with TMDLs, including WQBELs, is required to meet water quality standards. The tentative permit includes the opportunity for permittees to propose a watershed management program to comply with TMDLs, which would address compliance with receiving water limitations. The Regional Board cannot change federal law to relieve permittees from the possibility of citizen suits.</p> <p>The tentative permit is not proposing to amend the Basin Plan to revise implementation schedules. If a Basin Plan amendment occurs, the tentative permit includes a reopener to revise the permit consistent with the Basin Plan amendment, including TMDL reconsiderations that modify TMDL implementation schedules included in the Basin Plan.</p> <p>MS4 permits can only include compliance schedules for achieving WQBELs derived from interim and final TMDL WLAs, so long as the TMDL contains an implementation program adopted by the Regional Board and approved through the State's basin plan amendment process. TMDLs adopted by USEPA do not contain an implementation program. The</p>	<p>Revisions made to Part VI.E.</p>

	<p>litigation while Watershed Management Programs are being prepared and Basin Plan Amendments with implementation schedules are being drafted and adopted</p>		<p>Regional Board’s decision as to how to express permit conditions for USEPA established TMDLs is based on an analysis of several specific facts and circumstances surrounding these TMDLs and their incorporation into this Order, as explained in the Fact Sheet. For those reasons, the Board has determined that numeric WQBELs for these USEPA established TMDLs are infeasible at the present time. The Board may at its discretion revisit this decision within the term of the permit or in a future permit, as more information is developed to support the inclusion of numeric WQBELs. In lieu of inclusion of numeric WQBELs at this time, the tentative permit requires Permittees subject to WLAs in USEPA established TMDLs to propose and implement best management practices that will be effective in achieving the numeric WLAs. Permittees will propose these BMPs to the Board in a Watershed Management Program, which is subject to Regional Water Board Executive Officer approval.</p>	
<p>General</p>	<p>Final Waste Load Allocations for TMDLs that were established with no knowledge if and how they could be achieved will place Cities in immediate non-compliance.</p>	<p>City of Torrance</p>	<p>As discussed in response to other comments, Compliance with TMDLs, including WQBELs is necessary to meet water quality standards. The WLAs in the TMDLs include schedules for achieving the WLAs, which were adopted as part of the TMDL in consideration of the implementation strategies that would be used to achieve the WLAs and the time required to implement these strategies. These schedules do not require immediate compliance; rather, the schedules allow Permittees to achieve compliance with TMDL related requirements over time. There is only a small subset of the 33 TMDLs for which final compliance deadlines have passed, and only three of these are significant in terms of MS4 discharges. In all three cases, the final deadlines that have passed are related to non-storm water discharges from the MS4, not storm water discharges. The CWA requires that non-storm water discharges through the MS4 be effectively prohibited to the extent that they are a source of pollutants to receiving waters. Furthermore, these final deadlines occurred between 3½ to 6 years ago in most cases. Additionally, Permittees have been on notice since 2006 regarding the manner in which these TMDL requirements would be incorporated into the permit. The LA</p>	<p>None</p>

			<p>County MS4 Permit was reopened in 2006 and again in 2007 to include these very requirements.</p> <p>Further, a TSO would provide additional time to comply, where justified, rather than requiring immediate compliance with the final WQBELs.</p>	
<p>General</p>	<p>The statement that for approved Watershed Management Program used to establish compliance with Interim Water Quality-Based Effluent Limitations and Receiving Water Limitations, structural BMPs must be designed to treat the 85th percentile, 24-hour storm should be modified to allow for flexibility of BMPs. Retrofit BMPs may not be able to achieve treatment of the 85th percentile, 24-hour storm due to site constraints, but may be able to when combined with other BMPs or low impact development provisions into a <i>system of BMPs</i> that achieves compliance of RWL, WLA and MAL at the outfall or receiving water.</p> <p>Modify VI.E.2.d.(4)(b) on page 113 to read:</p> <p>“Structural storm water BMPs <i>or systems of BMPs</i> must be designed and maintained to treat storm water runoff from the 85th percentile, 24-hour storm . . .</p>	<p>City of Torrance (Comment 63), South Bay Cities</p>	<p>The Regional Board agrees with the proposed change.</p>	<p>Revision to Order, Part VI.E.2.d.(4)(b) , as proposed by commenter.</p>

<p>General</p>	<p>Please include a paragraph that Permittees are not responsible for pollutant sources outside the Permittees authority or control, such as aerial deposition, natural sources, sources permitted to discharge to the MS4, and upstream contributions.</p>	<p>LA Permit Group (Comment 23)</p>	<p>The permittees have ultimate authority and responsibility to prohibit, prevent, or otherwise control discharges that enter and exit the portions of the MS4 for which they are owners and/or operators. Even if the permittees do not themselves generate the pollutants entering/exiting their MS4s, the permittees are nevertheless responsible for ensuring that the pollutants do not reach receiving waters through their MS4. As recently stated by the 9th Circuit Court of Appeals, “the Clean Water Act does not distinguish between those who add and those who convey what is added by others - the Act is indifferent to the originator of water pollution.” (<i>NRDC v. County of Los Angeles</i> (2011) 673 F.3d 880, 900.) Thus, the Clean Water Act, and this permit, appropriately places responsibility for preventing or controlling MS4 discharges on the permittees.</p> <p>Further, it is the Board’s intention to regulate all pollutants, whether they are anthropogenic or naturally occurring, that are discharged from the MS4 to receiving waters. The entire purpose of a NPDES permit is to regulate discharges of “pollutants” from point sources to receiving waters. The Clean Water Act’s definition of “pollutant” in section 502(6) does not distinguish between pollutants that are caused by anthropogenic or naturally occurring sources. Further, the definition of “waste” in California Water Code section 13050(d) specifically includes waste “associated with human habitation, or of human or animal origin.” Even if a permittee is not able to control the source of a naturally occurring pollutant, permittees are required to control pollutants through an MS4 to receiving waters.</p> <p>Permittees are not responsible for direct aerial deposition on waterbodies. However, permittees are responsible for controlling discharges from their MS4. Therefore, permittees are responsible for controlling discharges of pollutants from indirect aerial deposition on land surfaces.</p> <p>Notwithstanding the above, the tentative order addresses sources</p>	<p>None</p>
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			<p>of pollutants outside the authority of MS4 Permittees. Discharges allowed by another NPDES permit are addressed in Part III, as an exception to the non-storm water discharge prohibition, and in Part VI.D.2.a.v. “Referral of Violations of the Industrial and Construction General Permits, including Requirements to File a Notice of Intent or No Exposure Certification”. Further, upstream contributions are addressed in several places including the Illicit Connections and Illicit Discharges Elimination Program (Part VI.D.9.b.iv.(2) and in the monitoring and reporting program through outfall based monitoring and jurisdictional boundary monitoring.</p>	
<p>General</p>	<p>This provision creates confusion and inconsistency with the language in the rest of the permit. By stating that the permittee shall demonstrate compliance through compliance monitoring points, it appears to preclude determining compliance through other methods as outlined in other portions of the permit. This provision does not reference any of the other compliance provisions in the TMDL section, and could therefore be interpreted on its own as a separate compliance requirement. Additionally, the requirement to use the TMDL established compliance monitoring locations regardless of whether an approved TMDL monitoring plan or Integrated plan has been developed is not consistent with the goal of integrated monitoring outlined in the permit. This provision</p>	<p>LA Permit Group (Comment 24)</p>	<p>The Regional Board agrees with the commenter’s proposed language.</p>	<p>Language revised</p>

	<p>would be more appropriate as a monitoring and reporting requirement for the TMDL section with modified language such as "Monitoring locations to be used for demonstrating compliance in accordance with Parts VI.E.2.d or VI.E.2.e shall be established at compliance monitoring locations established in each TMDL or at locations identified in an approved TMDL monitoring plan or in accordance with an approved integrated monitoring program per Attachment E Part VI.C.5 (Integrated Watershed Monitoring and Assessment)."</p>			
<p>General</p>	<p>For "each Permittee is responsible for demonstrating that its discharge did not cause or contribute to an exceedance," how is this going to be possible? There is allowed non-storm water discharges, a commingled system, and the LA County region is practically urbanized (impervious landscape). Additionally, a gas tanker on local freeways often discharges onto freeway drains, which connect to MS4 permittee drains - the point here is a private party as the actual discharger should be held responsible and not the MS4 permittee. Lastly, the Construction General Permit</p>	<p>LA Permit Group (Comment 25)</p>	<p>The permit covers a large geographic area. Permittees that discharge to a common outfall where the discharges commingle in the receiving water may be responsible for violations of the receiving water limitation. Once the Board determines that there is a violation of the receiving water limitations, or other conditions of the permit, based on monitoring reports and/or other information, it is up to the permittee to demonstrate that they are not responsible for the specific violation. The permit sets forth methods for a discharger to demonstrate that they are not responsible. The dischargers are responsible for complying with the terms of the permit; they cannot use another commingled discharger to shield themselves from responsibility for the discharge where they provide no information to show that they did not cause or contribute to the discharge. This view is consistent with the Clean Water Act which imposes strict liability and requires dischargers to establish and maintain records, sample and monitor discharges and report the results to the Board. (See, e.g., 33 U.S.C. § 1318(a); 40 C.F.R. § 122.41(j); 122.48 & 123.5.) This system of self-reporting is critical to the NPDES program, which</p>	<p>None</p>

	<p>cannot establish numeric limitations without the Regional/State Boards clearly demonstrating how compliance will be achieved - the MS4 permit is overly conditioned in terms of achieving compliance and subjects MS4 permittees to violations/enforcement, and given these circumstances, the Boards need to clearly demonstrate how compliance will be achieved.</p>		<p>“fundamentally relies” upon it. (See <i>U.S. v. Brittain</i> (10th Cir. 1991) 931 F.2d 1413, 1416.) In addition, the federal regulations contemplate that co-permittees will be responsible for developing management programs and controls involving inter-governmental coordination to reduce the discharge of pollutants (40 C.F.R. § 122.26(d)(2)(iv)), must agree to accept roles and responsibilities necessary to ensure effective coordination (40 C.F.R. § 122.26(d)(2)(vii)); and must have legal authority and agreement with other dischargers to control contribution of pollutants from one portion of the MS4 to another (40 C.F.R. § 122.26(d)(2)(i)(D)). The Clean Water Act puts the onus on the permittee to have sufficient control over its system to prevent discharges that are not compliant. (See, e.g., 40 C.F.R. § 122.26(d)(2)(iv)(B)(3) [application for permit must show how permittees will investigate any part of their system with a reasonable potential for contributing pollutants into the system from other sources].)</p> <p>The draft tentative order addresses the issue of discharges from non-MS4 entities through the MS4 in a variety of ways. First, for non-storm water discharges, Parts III.A.4.d-e. and III.A.5. address authorized and conditionally exempt non-storm water discharges. Second, the issue of commingled discharges is addressed in Part VI.E.2.b. Storm water discharges by other entities (e.g., co-permittees, industrial facilities or construction sites covered by Statewide General Storm Water Permits) are addressed in Parts VI.A.2. “Legal Authority” and VI.D.2.iv. and v. “Progressive Enforcement and Interagency Coordination,” while illicit discharges including spills are addressed in Part VI.D.9.b.iv. and v.</p> <p>It is unclear why the commenter is referring to the Construction General Permit, as that permit is issued by the State Board and not this Regional Board.</p>	
<p>General</p>	<p>This provision should not require that the permittee demonstrate that the discharge</p>	<p>LA Permit Group (Comment 26)</p>	<p>The Regional Board agrees with the comment. The tentative order is revised to allow a Permittee to demonstrate that the discharge from the Permittee’s MS4 is <i>controlled</i> to a level</p>	<p>Part VI.E.2.b.v.(2) – change</p>

	from the MS4 is treated to a level that does not exceed the applicable water quality-based effluent limitation. Permittees may achieve the applicable WQBELs through means other than treatment and they should be able to demonstrate that their discharge does not exceed the applicable water quality-based effluent limitation through monitoring or other means than demonstration of treatment.		that does not exceed the applicable WQBEL.	“treated” to “controlled”
General	<p>Is this in effect setting a design storm for the design of structural BMPs to address attainment of TMDLs, or is it simply referring to SUSMP/LID type structural BMPs? If it is in effect setting a design storm, there needs to be some sort of exception for TMDLs in which a separate design storm is defined, e.g., for trash TMDLs where the 1-year, 1-hour storm is used.</p> <p>This is not clarified, but it is still a problem as not all retrofit projects which might be used to address TMDLs may be able to handle the full 85th percentile 24-hour storm, there should be some provision for doing this through a combination of BMPs, e.g., LID plus retrofit.</p>	LA Permit Group (Comment 28)	<p>Part VI.E.2.d.i.(4)(b) of the tentative order has been modified to read:</p> <p>“Structural storm water BMPs <i>or systems of BMPs</i> must be designed and maintained to treat storm water runoff from the 85th percentile, 24-hour storm, <i>and meet other storm design criteria established through TMDLs applicable to the watershed, and ...</i>”</p>	Revision to Part VI.E.2.d.i.(4)(b)
RWLs	Since the ultimate end goal of the TMDL is protection of	City of Los Angeles	Applicable receiving water limitations are those receiving water limitations (i.e., all water quality objectives or criterion	None

	<p>beneficial uses, attainment of water quality objectives/criteria protective of those uses should constitute compliance with the TMDL. However, Section E Parts 2.b.v.2, 2.d.i.2, and 2.e.i.2 limits this concept to applicable receiving water limitations. If water quality objectives/criteria are met in the receiving waters, Permittees should be in compliance with the TMDL regardless if the receiving water limitation is explicitly incorporated into the permit.</p> <p>Additionally, the language places upstream dischargers in jeopardy if downstream dischargers cause or contribute to exceedances. The current language indicates that compliance can be demonstrated if there are no exceedances at, or downstream of, the Permittee's outfall. For example, if a water quality objective is met in Reach 6 of the LA River but not in Reach 2 (over 20 miles downstream and a change in flow of over 80 cfs), those discharging to Reach 6 could be considered out of compliance.</p> <p>Based on these issues, please revise as follows: Section E Part 2.b.v.2</p>	<p>(Comment 61)</p>	<p>established pursuant to CWA section 303(c) or limitations to achieve such water quality objectives or criterion, such as receiving water conditions established in TMDLs) that apply to the subject water body. If water quality objectives/criteria for the pollutants addressed by the TMDLs are met in the receiving waters, Permittees would be in compliance.</p> <p>Monitoring data from outfalls and from the receiving water immediately downstream of the outfall will be used to determine whether upstream discharges have caused or contributed to downstream exceedances.</p>	
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	<p>“Demonstrate that the discharge from the Permittee’s MS4 is treated to the level that does not exceed the applicable water quality-based effluent limitation or <u>water quality objective.</u>”</p> <p>Section E Parts 2.d.i.2 and 2.e.i.2 as follows: There are no exceedances of the applicable receiving water limitation <u>water quality objectives</u> for the pollutant(s) associated with the specific TMDL in the receiving water(s) at, or downstream of, <u>the Permittee’s outfall(s).</u></p>			
<p>Design Storm</p>	<p>This incorporation of such a design standard seems to imply that during larger storms, water quality standards may not have to be met. Also please clarify if this is a recommendation or the intent is to prohibit the implementation of BMPs that will provide partial treatment of this design storm. Clarify the intended purpose of design standard.</p>	<p>City of Los Angeles (Comment 62)</p>	<p>The requirement to design and maintain storm water BMPs to treat storm water runoff from the 85th percentile, 24-hour storm only relates to structural BMPs. Permittees are expected to implement structural and non-structural controls to achieve water quality standards. This provision has been revised to state that structural storm water BMPs <i>should be</i> designed and maintained to treat runoff from the 85th percentile, 24-hour storm <i>at a minimum, where feasible.</i></p>	<p>Revision to Part IV.E.2.d.i.(4)(b)</p>
<p>Definition of outfall</p>	<p>Provide a consistent definition of outfall. A municipal storm drain outfall (or conduit) shall have a minimum pipe size of 24-inch diameter where a maintenance access or other point of access can be built based on hydraulic engineering design standards at the Permittee’s jurisdictional</p>	<p>City of Los Angeles (Comment 63)</p>	<p>The federal definition of “outfall” has been added to Attachment A, as follows: “<i>Outfall</i> means a <i>point source</i> as defined by 40 CFR §122.2 at the point where a municipal separate storm sewer discharges to waters of the United States and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other waters of the United States and are used to convey waters of the United States.”</p>	<p>Attachment A, added definition of “outfall” from 40 CFR § 122.26(b)(9) Added definition of “MS4 Access</p>

	boundary.		A new definition for MS4 access point has been added to Attachment A as follows: “An MS4 access point shall have a minimum 24-inch diameter pipe size where a maintenance access or other point of access can be built based on hydraulic engineering design standards at the Permittee’s jurisdictional boundary.”	Point”
WMP	Please note our comment regarding additional time will be needed for a more comprehensive Watershed Management Program Plan in Attachment A.	City of Los Angeles (Comment 64)	The tentative order has been revised to allow Permittees who work collaboratively and implement early actions to request 18 months to submit a draft Watershed Management Program instead of one year.	Language revised
General	Please add the language from interim limits E.2.d.4 a - c and EPA TMDLs to the Final Water Quality Based Effluent Limitations and/or Receiving Water Limitations to ensure sufficient coordination between all TMDLs and the timelines and milestones that will be implemented in the Watershed Management Program.	LA Permit Group (Comment 29)	It is premature to consider application of this BMP based compliance demonstration option to the final effluent limitations and final receiving water limitations – most of which have deadlines outside the term of the tentative order. More data is needed to validate assumptions and model results regarding the linkage among BMP implementation, the quality of MS4 discharges, and receiving water quality to have the necessary assurance that these BMPs will ultimately achieve the final effluent limitations. The Regional Board will evaluate the effectiveness of this BMP-based compliance determination approach in ensuring that interim effluent limitations for storm water are achieved during this permit term. If this approach is effective, the Regional Board may consider within this permit term or during the next permit cycle whether it would be appropriate to allow a similar approach for demonstrating compliance with final effluent limitations applicable to storm water.	Revisions made to Part VI.A.7.a
General	This provision states "Permittees shall comply immediately ... for which final compliance deadlines have passed pursuant to the TMDL implementation schedule." This provision is unreasonable. First, various brownfields/abandoned toxic	LA Permit Group (Comment 30)	There is only a small subset of the 33 TMDLs for which final compliance deadlines have passed. None of these TMDLs are for toxic pollutants that might be related to brownfields/abandoned toxic sites. Only three of these are significant in terms of MS4 discharges. In all three cases, the final deadlines that have passed are related to non-storm water discharges from the MS4, not storm water discharges. The CWA requires that non-storm water discharges through the MS4 be effectively prohibited to the extent that they are a	None

	<p>sites exists, some of which were permitted to operate by State/Federal agencies - nothing has or will likely be done with these sites that contribute various pollutants to surface and sub-surface areas. Additionally, this permit is going to require a regional monitoring program - this program will yield results on what areas are especially prone to particular pollutants. Until these results are made known, MS4 Permittees will have a hard time knowing where to focus its resources and particularly, the placement of BMPs to capture, treat, and remove pollutants. For these reasons, this provision should be revised to first assess pollutant sources and then focus on compliance with BMP implementation.</p>		<p>source of pollutants to receiving waters. Furthermore, these final deadlines occurred between 3½ to 6 years ago in most cases. Additionally, Permittees have been on notice since 2006 regarding the manner in which these TMDL requirements would be incorporated into the permit. The LA County MS4 Permit was reopened in 2006 and again in 2007 to include these very requirements. Further, Permittees may request a TSO, which would provide additional time to comply, where justified, rather than requiring immediate compliance with the final WQBELs.</p>	
<p>General</p>	<p>Please clarify that cities are not responsible for retrofitting.</p>	<p>LA Permit Group (Comment 31)</p>	<p>The Inventory of Existing Development for Retrofitting Opportunities in Part VI.D.8.d. does not require Permittees to implement retrofitting projects. Permittees may comply with applicable WQBELs and receiving water limitations contained in the Order using any lawful means.</p>	<p>None</p>
<p>General</p>	<p>Define "partial capture devices", define "institutional controls". Permittees need to have clear direction of how to attain the "zero" discharges which will have varying degrees of calculations regardless of which compliance</p>	<p>LA Permit Group (Comment 33)</p>	<p>Existing definitions for "partial capture device", "institutional controls", "full capture system", "Daily Generation Rate (DGR)", and "Baseline Waste Load Allocation" contained in Order No. 01-182 were inadvertently omitted from Attachment A of the tentative order. These definitions have been added to Attachment A.</p>	<p>Revisions to Attachment A.</p>

	method is followed. Explain the Regional Board's approval process for determining how institution controls will supplement full and partial capture to attain a determination of "zero" discharge.			
Receiving Water Limitations	Further, the Regional Water Board should work with the State Water Board to consider other ways to strengthen the iterative process mandated by Order 99-05. The magnitude of changes resulting from expressing the final waste load allocations from 33 TMDL documents as numeric water quality-based effluent limitations could place some Permittees in immediate non-compliance with the permit if they do not have the ability to respond to exceedances of water quality standards, including WQBELs, through an orderly adaptive management process	City of Signal Hill	TMDLs and the schedules of implementation adopted as part of the TMDLs create an orderly iterative process for achieving compliance with the final WQBELs. If additional time is needed beyond that originally established in the TMDL, the Board may reconsider TMDLs at any time. Further, the tentative order recognizes that Permittees may request time schedule orders, where justified, which also provide an orderly iterative process for coming into compliance.	None
TSOs	<u>Section VI.E.2.c.iii Receiving Water Limitations Addressed by a TMDL</u> This section states, "it is not the Regional Water Board's intention to take an enforcement action for violations of Part V.A. of this Order for the specific pollutant(s) addressed in the TSO." Although the Regional Board does not intend	City of Malibu; City of Torrance (Comment 62), South Bay Cities, Peninsula Cities (Comment 32); El Segundo	Each TMDL sets a compliance deadline as required by federal law. In some cases, the compliance deadline has passed. Unlike state law, the federal Clean Water Act allows for citizen suits. The Regional Board cannot change federal law to avoid the possibility of citizen suits, but can only use the authority it has under state law to provide additional time for compliance. The tentative permit provides various approaches to provide time for compliance. The Water Code provides for the use of time schedule orders where justified to allow additional time to comply with such deadlines, and would protect a permittee from imposition of mandatory minimum	None

	to take enforcement action if the permittee is in compliance with the TSO, submittal of a TSO and implementing a compliance plan does not shield the City from citizen suits and may actually increase the risk of legal liability from citizen suits while the City is implementing its compliance schedule. This is a significant vulnerability that needs to be resolved.		penalties. The tentative permit sets forth the process the Regional Board will use in considering the issuance of time schedule orders.	
TMDL Reopener	Any TMDL, for which compliance with a waste load allocation (WLA) is exclusively set in the receiving water, shall be amended by a re-opener to also allow compliance at the outfall to allow that flexibility, or other end-of-pipe, that shall be determined by translating the WLA into non-numeric WQBELs, expressed as best management practices (BMPs). While the TMDL re-opener is pending, an affected Permittee shall be in compliance with the receiving water WLA through the implementation of permit requirements	LA Permit Group (Comment 1)	Reconsideration of TMDLs is outside the scope of the LA County MS4 Permit renewal. Permit requirements to comply with existing regulations contained in the Basin Plan cannot be suspended in anticipation of revising the regulation in the future. The tentative order contains a standard provision that allows the order to be re-opened to incorporate provisions as a result of future amendments to the Basin Plan, such as the adoption or reconsideration of a TMDL (see Part VI.A.7.iv.).	None
TMDL	Suggest wet weather compliance be partially defined by a design storm.	LA Permit Group (Comment 19)	Where a permittee demonstrates that a storm water controls to address a certain size of design storm would be sufficient to achieve applicable WQBELs and would ensure that MS4 discharges would not cause or contribute to an exceedance of receiving water limitations, the Board could consider such an approach in the future.	None
TMDL	Regional Board staff has	LA Permit Group	It is important to note that expectations with regard to MS4	None

<p>incorrectly determined that a WQBEL may be the same as the TMDL WLA, thereby making it a “numeric effluent limitation.” Although numerous arguments may be marshaled against the conclusion, the most compelling of all is the State Water Resources Control Board’s clear opposition reluctance to use numeric effluent limitations.</p> <p>In Water Quality Orders 2001-15 and 2009-0008 the State Board made it clear that: we will generally not require “strict compliance” with water quality standards through numeric effluent limitations,” and instead “we will continue to follow an iterative approach, which seeks compliance over time” with water quality standards.</p> <p>[Please note that the iterative approach to attain water quality standards applies to the outfall and the receiving water.]</p> <p>More recently, the State Board commented in connection with the draft Caltrans MS4 permit that numeric WQBELs are not feasible as explained in the following provision from its most recent Caltrans draft</p>	<p>(Comment 20); Cities of: Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, San Gabriel and West Covina</p>	<p>permit requirements have changed since the early 2000s. This is apparent by examining the USEPA’s guidance on the inclusion of TMDL WLAs into MS4 permits from 2002 with more recent guidance from 2010 – USEPA expresses its position in 2002 as one in which it expects numeric effluent limitations will only be used in rare instances, while in 2010, USEPA states that numeric effluent limitations should be used where feasible to improve the accountability of storm water programs.</p> <p>Further, the inclusion of numeric effluent limitations is authorized by Clean Water Act section 402(p)(3)(B)(iii). This requirement gives USEPA or the State permitting authority discretion to determine what permit conditions are necessary to control pollutants. (See <i>Defenders of Wildlife v. Browner</i> (1999) 191 F.3d 1159, 1166). In its Phase I Stormwater Regulations, Final Rule, USEPA elaborated on these requirements, stating that, “permits for discharges from municipal separate storm sewer systems must require controls to reduce the discharge of pollutants to the maximum extent practicable, and where necessary water quality-based controls” (see 55 Fed. Reg. 47990, 47994 (Nov. 16, 1990). Water quality based effluent limitations must be consistent with the assumptions and requirements of available WLAs. WQBELs may be expressed narratively or numerically.</p> <p>Further, it should be noted that the State Water Board has expressed its strong intent that federally mandated TMDLs be given substantive effect in MS4 permits in order to improve the efficacy of MS4 permits. The State Water Board has stated that whether a future MS4 permit requirement appropriately implements a storm water WLA will need to be decided based on the Regional Water Board’s record supporting either the numeric or non-numeric effluent limitations contained in the permit.</p> <p>40 CFR section 122.44(k) provides that BMPs may be used as permit requirements in lieu of numeric effluent limitations</p>	
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	<p>order:</p> <p>Storm water discharges from MS4s are highly variable in frequency, intensity, and duration, and it is difficult to characterize the amount of pollutants in the discharges. In accordance with 40 CFR § 122.44(k)(2), the inclusion of BMPs in lieu of numeric effluent limitations is appropriate in storm water permits. This Order requires implementation of BMPs to control and abate the discharge of pollutants in storm water to the MEP.</p> <p>The State Board’s decision not to require numeric WQBELs in this instance appears to have been influenced by among other considerations, the <i>Storm Water Panel Recommendations to the California State Water Resources Control Board in re: The Feasibility of Numeric Effluent Limits Applicable to Discharges of Storm Water Associated with Municipal, Industrial and Construction Activities</i>.</p>		<p>only when numeric effluent limitations are found to be infeasible. The Regional Water Board concludes that numeric WQBELs are feasible. While a lack of data may have hampered the development of numeric WQBELs for MS4 discharges in earlier permit terms, in the last decade, 33 TMDLs have been developed for water bodies in Los Angeles County in which WLAs are assigned to MS4 discharges. In each case, part of the development process entailed analyzing pollutant sources and allocating loads using empirical relationships or quantitative models. As a result, it is possible to use these numeric WLAs to derive numeric WQBELs for MS4 discharges.</p> <p>The State Water Board, in Order WQ 2006-0012 (Boeing), has made clear that “infeasibility” refers to “the ability or propriety of establishing” numeric limits, as opposed to the feasibility of compliance. USEPA also testified before this Board during the hearing on October 4-5, 2012 that the feasibility of numeric effluent limitations refers to the ability to calculate the numeric effluent limitations not to the feasibility of compliance with such limitations.</p> <p>While the State Board recently issued the Caltrans MS4 permit without numeric effluent limits, it did incorporate by reference the WLAs assigned to Caltrans as contained in regional basin plans, including those contained in the Basin Plan for this region. The State Board made clear that it would reopen the Caltrans permit within one year to include detailed provisions implementing all TMDL WLAs in the state applicable to Caltrans. At that time, the State Board may include numeric WQBELs.</p>	
RWL	Please add receiving water limitations with iterative approach consistent with the CASQA language; as long as	City of Santa Clarita (Comments 50, 51)	Part VI.E.2.c. of the tentative order provides that a Permittee shall not be considered in violation of this Order for the specific pollutant addressed in the TMDL if it is in compliance with the applicable TMDL requirement(s), including	None

	the permittee is following BMPs addressed in a watershed management plan the permittee shall be in compliance as in E.2d.1.4		compliance schedules, of Part VI.E. and Attachments L through R. Section V.A. of the Fact Sheet (Attachment F) discusses how exceedances of RWLs for water body-pollutant combinations not addressed by a TMDL will be addressed.	
Past Deadlines	This statement should be removed until such time as the Regional Board revisits all the studies that Permittees have developed, including natural source exclusions and other studies that explain sources that are outside Permittees control.	City of Santa Clarita (Comment 52)	Permit requirements to comply with existing regulations contained in the Basin Plan cannot be suspended in anticipation of revising the regulation in the future. The tentative order contains a standard provision that allows the order to be re-opened to incorporate provisions as a result of future amendments to the Basin Plan, such as the adoption or reconsideration of a TMDL (see Part VI.A.7.iv.).	None
WQBELs				
WQBELs	Reading the 2010 USEPA memorandum, together with Mr. Weiss's memorandum, creates the inescapable conclusion that (1) numeric WQBELs are permissible if "feasible" and (2) numeric WQBELs cannot be construed to only mean strict effluent limitations at the end-of-pipe (outfall) but more realistically must include surrogate parameters and other variants as well. Regional Board staff failed to examine alternative numeric WQBELs, along with BMP WQBELs, as a consequence of not conducting the appropriate analysis	Cities of: Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, San Gabriel and West Covina; City of Signal Hill	Regarding the feasibility of numeric effluent limitations, the Regional Water Board concludes that numeric WQBELs are feasible. While a lack of data may have hampered the development of numeric effluent limitations for MS4 discharges in earlier permit cycles, in the last decade, 33 TMDLs have been developed for water bodies in Los Angeles County in which WLAs are assigned to MS4 discharges. In each case, part of the development process entailed analyzing pollutant sources and allocating loads using empirical relationships or modeling approaches. As a result, it is possible to use these numeric WLAs to derive numeric WQBELs for MS4 discharges. USEPA has also acknowledged that its expectations regarding the application of numeric WQBELs to municipal storm water discharges have changed as the storm water permit program has continued to mature over the last decade. Federal regulations state that effluent limitations must be consistent with the assumptions and requirements of available WLAs. In its November 12, 2010 memo, USEPA stated that, "[w]here the WLA of a TMDL is expressed in terms of a surrogate pollutant parameter, then the corresponding permit can generally use the surrogate pollutant parameter in the WQBEL as well" (p. 3) (emphasis added). However, USEPA does not endorse the use of surrogate pollutant parameters where the WLA is not expressed in terms of the	None

			<p>surrogate parameter. The WLAs for the 33 TMDLs incorporated into the tentative order are expressed as actual pollutant loads and concentrations, not in terms of surrogate parameters. Additionally, the State and Regional Water Boards have concluded that sole reliance on MEP based permit requirements is not sufficient to ensure the achievement of water quality standards. Further, there is insufficient data and information available at this time on the prospective implementation of BMPs throughout Los Angeles County to provide the Regional Water Board reasonable assurance that the proposed BMPs would be sufficient to achieve the WQBELs. However, the tentative order allows Permittees to demonstrate compliance with interim WQBELs through implementation of actions (i.e., BMPs) in approved WMPs.</p>	
<p>WQBELs for non-stormwater</p>	<p>There cannot be a WQBEL to attain a dry weather TMDL WLA nor a WQBEL that addresses a non-stormwater municipal action level (MAL).</p> <p>The foundation for this argument lies in the federal limitation of non-stormwater discharges to the MS4 – not from or through it as the tentative order concludes.</p> <p>Conclusion: Regional Board does not have the legal authority to compel compliance with dry weather WQBELs or non-stormwater MALs.</p> <p>Recommended Correction: Eliminate all references to comply with numeric WQBELs</p>	<p>Cities of: Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, San Gabriel and West Covina</p>	<p>This comment is specifically addressed in the “Non-Stormwater Discharges Matrix.”</p> <p>WQBELs are required for discharges that cause, contribute to, or have the reasonable potential to cause or contribute to exceedances of water quality standards. Through the development of the TMDLs being incorporated in the tentative order, the Regional Board determined that non-storm water discharges of pollutants from the Los Angeles County MS4 cause, have the reasonable potential to cause, or contribute to an excursion above water quality standards. Therefore, where appropriate based on the source analysis, dry weather WLA were assigned to Los Angeles County MS4 discharges during the adoption of the TMDLs.</p> <p>At the permitting stage, Regional Board determined reasonable potential through a qualitative assessment process consistent with the USEPA NPDES Permit Writers Manual, Chapter 6, section 6.3.3. As part of this process, the Permit Writers Manual reiterates that where there is a pollutant with a WLA from a TMDL, a permit writer must develop WQBELs or other permit requirements consistent with the assumptions and requirements of any WLA that has been assigned to the discharge as part of an approved TMDL per 40 CFR section</p>	<p>None</p>

			<p>122.44(d)(1)(vii)(B). Therefore, WQBELs have been included in the tentative order for those pollutants with TMDL WLAs assigned to Los Angeles County MS4 discharges. The analysis contained in the TMDLs and the fact sheet for the tentative order provides the support and rationale for the determination that discharges from the MS4 have the reasonable potential to cause or contribute to excursion above water quality standards in the receiving water (Attachment F).</p> <p>The Permit Writers Manual further specifies that even without a TMDL, a permitting authority could, at its own discretion, determine that WQBELs are needed for any pollutant associated with impairment of a waterbody. The tentative order concludes that non-storm water action levels are a necessary tool to address dry weather impairments in water bodies not currently addressed by a TMDL. The non-storm water action levels are not WQBELs, rather they are a tool for identifying non-storm water discharges from the MS4 that may be causing or contributing to the water quality impairments in the receiving water. This data will help Permittees target areas for focused implementation of control measures, such as their illicit connection/illicit discharge elimination program.</p>	
Non-stormwater	Federal stormwater regulations limits outfall monitoring to stormwater discharges. Therefore, Regional Board does not have the legal authority to compel compliance with dry weather WQBELs or non-stormwater MALs.	Cities of: Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, San Gabriel and West Covina	<p>This comment is specifically addressed in the “Non-Stormwater Discharges Matrix.”</p> <p>Federal MS4 regulations do not limit outfall monitoring to stormwater discharges. Both receiving water monitoring and outfall (i.e. discharge or effluent) monitoring are well established in NPDES permits generally, and are supported by myriad federal authorities (See CWA section 308(a); 40 CFR sections 122.26(d)(2)(i)(F) and (d)(2)(iii)(D), 122.41(h), (j)-(l), 122.42(c), 122.44(i), and 122.48), as well as USEPA’s Part 2 MS4 permit application guide (USEPA 833-B-92-002). Specifically, outfall screening, including sampling, for non-storm water discharges from the MS4 is required per 40 CFR sections 122.44(d)(1)(iv)(D) and 122.44(d)(2)(iv)(B)(2)-(3).</p>	None
BMPs	Regulations do not require WQBELs to be numeric in	City of Signal Hill	While the permitting authority has some discretion in establishing permit requirements consistent with the	None

	<p>order to be consistent with the assumptions and requirements of waste load allocations. In fact, 2002 and 2010 EPA guidance memos both clearly allow the WQBELs in permits to be expressed either numerically or in the form of BMPs. It is a decision left to the permitting authority.</p>		<p>assumptions and requirements of available WLAs, this discretion is constrained in certain ways. Specifically, while BMPs are central to MS4 permits, permit requirements may only rely upon BMP based limitations in lieu of numeric effluent limitations if: (1) the BMPs are adequate to achieve water quality standards and (2) numeric effluent limitations are infeasible. There is insufficient data and information available at this time on the prospective implementation of BMPs throughout Los Angeles County to provide the Regional Water Board reasonable assurance that the BMPs will be sufficient to achieve the WQBELs.</p> <p>Regarding the feasibility of numeric effluent limitations, the Regional Water Board concludes that numeric WQBELs are feasible. While a lack of data may have hampered the development of numeric WQBELs for MS4 discharges in earlier permit terms, in the last decade, 33 TMDLs have been developed for water bodies in Los Angeles County in which WLAs are assigned to MS4 discharges. In each case, part of the development process entailed analyzing pollutant sources and allocating loads using empirical relationships or quantitative models. As a result, it is possible to use these numeric WLAs to derive numeric WQBELs for MS4 discharges. Further, the State Water Board, in Order WQ 2006-0012 (Boeing), has made clear that “infeasibility” refers to “the ability or propriety of establishing” numeric limits, as opposed to the feasibility of compliance.</p> <p>Lastly, to the extent the Board is exercising discretion in including numeric limits, which the Board has deemed appropriate to control pollutants in accordance with federal law, the Board is exercising discretion required and/or authorized by federal law, not state law. (See, <i>City of Rancho Cucamonga v. Regional Water Quality Control Bd.-Santa Ana Region</i> (2006) 135 Cal.App.4th 1377, 1389; <i>Building Industry Ass’n of San Diego County v. State Water Resources Control Bd.</i> (2004) 124 Cal.App.4th 866, 882-883.)</p>	
<p>WQBELs</p>	<p>A BMP based approach to compliance determination</p>	<p>City of Signal Hill</p>	<p>The tentative order provides Permittees the opportunity to develop Watershed Management Programs, which may</p>	<p>None</p>

	would allow credit for pollution prevention programs, such as SB 346, which target the true sources of pollutants over which Permittees have little or no control. Integrating WQBELs into the next generation of MS4 permits in the form of BMPs will encourage experimentation and strong pollution prevention efforts that could lead to achievement of water quality standards in a cost-effective manner		include implementation of pollution prevention efforts (including product reformulation/input change such as the elimination of copper in brake pads). Implementation of these efforts may be used to demonstrate compliance with interim WQBELs.	
WQBELs	In most cases, converting waste load allocations to WQBELs expressed as BMPs should not be time consuming, and having BMP implementation targets is an understandable and manageable task if money is available. On the other hand, meeting numeric WQBEL targets can be frustrating and potentially paralyzing and could cause more money to be spent on lawyers than on best management practices and other control measures. We urge you to direct staff to use the WQBELs as BMPs approach in a Revised Tentative Order	City of Signal Hill	The tentative order allows Permittees to develop Watershed Management Programs and then using implementation of these programs as a means of demonstrating compliance with interim WQBELs. It is premature to consider application of this action based compliance demonstration option to the final WQBELs and final RWLs that have deadlines outside the term of this Order. More data are needed to validate assumptions and model results regarding the linkage among BMP implementation, the quality of MS4 discharges, and receiving water quality. The Regional Water Board will evaluate the effectiveness of this action based compliance determination approach in ensuring that interim WQBELs for storm water are achieved during this permit term. If this approach is effective, the Regional Water Board may consider within this permit term or during the next permit cycle whether it would be appropriate to allow a similar approach for demonstrating compliance with final WQBELs applicable to storm water.	None
WQBELs	The City of Signal Hill requests that the Board recognize the fears of Permittees and encourage expedient efforts to address the water quality	City of Signal Hill	The tentative order allows Permittees to develop Watershed Management Programs and then using implementation of these programs as a means of demonstrating compliance with interim WQBELs. It is premature to consider application of this action based compliance demonstration option to the final	None

	<p>impairments by including WQBELs expressed in the form of MEP compliant BMPs in the MS4 permits. Ideally, we would prefer that WQBELs always be expressed in the form of BMPs. However, we acknowledge that both the Board and the environmental community have concerns about the commitment of municipalities to effectively address water quality impairments. We believe that municipalities are more committed to improving water quality than either the Board or environmental groups believe we are. In order to give us a chance to demonstrate our commitment, we ask that you express WQBELs in the MS4 permits for at least the next permit term in the form of BMPs, with the provision that you will review this decision during the development of the next cycle of permits</p>		<p>WQBELs and final RWLs that have deadlines outside the term of this Order. More data are needed to validate assumptions and model results regarding the linkage among BMP implementation, the quality of MS4 discharges, and receiving water quality. The Regional Water Board will evaluate the effectiveness of this action based compliance determination approach in ensuring that interim WQBELs for storm water are achieved during this permit term. If this approach is effective, the Regional Water Board may consider within this permit term or during the next permit cycle whether it would be appropriate to allow a similar approach for demonstrating compliance with final WQBELs applicable to storm water.</p>	
<p>WQBELs</p>	<p>Part IV.A.2 of the Permit must be revised to clarify that the WLAs in the specified TMDLs are incorporated into the permit as WQBELs, rather than merely stating that the WQBELs “are established.”</p>	<p>Environmental Groups</p>	<p>WQBELs are derived from the WLAs applicable to Permittees’ MS4 discharges.</p>	<p>None</p>
<p>WQBELs</p>	<p>The CWA does not require the inclusion of WQBELs but makes their inclusion discretionary. Thus, if the</p>	<p>County of Los Angeles (Comment 192)</p>	<p>Section IV.C. of the Fact Sheet adequately supports the inclusion of WQBELs.</p>	<p>None</p>

	Board includes WQBELs in the permit, it must do so in a way that does not abuse that discretion.			
WQBELs	The Fact Sheet's reference to State Board Order No. 2011-015 does not appear to support the Fact Sheet's statement the sole reliance in MS4 permits on BMP-based requirements was not sufficient to ensure attainment of water quality standards.	County of Los Angeles (Comment 192)	The Fact Sheet and the information in the record adequately supports the conclusion that sole reliance on BMP-based requirements has not resulted in achieving water quality standards in the receiving waters of impaired water bodies.	None
WQBELs – References to 2010 USEPA memorandum	The Board should not cite this memo as authority and all references should be deleted. No decision on the memo has been made to date. Also, memo is a guidance memo, which USEPA has stated has no binding effect on any person, including USEPA, states or any regulated party.	County of Los Angeles (Comment 193)	Clean Water Act section 402(p)(3)(B)(iii) provides the authority for the Regional Board to include WQBELs in the permit. (See also <i>Defenders of Wildlife v. Browner</i> (1999) 191 F.3d 1159, 1166). The USEPA guidance memo is consistent with the Clean Water Act and the cited case. In addition, to date, there has been no indication that USEPA has withdrawn its memo. Thus, it is appropriate for the Board to refer to the memo and the statements therein.	None
WQBELs	The Board's proposal to invoke WLAs as WQBELs is improper. WLAs serve an entirely different purpose than do WQBELs; and WLAs are not crafted pursuant to the Section 122.44(d)(1) procedures.	BILD	Clean Water Act section 402(p)(3)(B)(iii) provides the authority for the Regional Board to include WQBELs in the permit. (See also <i>Defenders of Wildlife v. Browner</i> (1999) 191 F.3d 1159, 1166.) The Regional Board is required to implement the TMDLs through the MS4 permit where WLAs are assigned to permittees.	None
WQBELs	To the extent that the Board intends that exceedances measured pursuant to required monitoring shall be ipso facto or presumptive permit violations, then the permit requirements would not only	BILD	Through the development of the TMDLs being incorporated in the tentative order, the Regional Board determined that non-storm water and storm water discharges of pollutants from the Permittees' MS4s cause, have the reasonable potential to cause, or contribute to an excursion above water quality standards. Therefore, where appropriate based on the source analysis, WLAs were assigned to Permittees' MS4 discharges	None

	<p>exceed minimum federal requirements, they would violate federal NPDES regulations. Specifically, 40 CFR section 122.44(d)(1)(ii) and (iii) set forth the procedures that EPA or a state agency that is authorized to implement NPDES must follow whenever establishing WQBELs. The Board has pursued none of the Section 122.44(d)(1) procedures concerning the translation of water quality standards into WQBELs. The Board must not establish any WQBELs without first undertaking the 122.44(d)(1) procedures. Given the extreme variability of storm water, it is most probable that compliance with the Section 122.44(d)(1) procedures would result in adherence to an iterative BMP process approach.</p>		<p>during the adoption of the TMDLs.</p> <p>At the permitting stage, Regional Board determined reasonable potential through a qualitative assessment process consistent with the USEPA NPDES Permit Writers Manual, Chapter 6, section 6.3.3. As part of this process, the Permit Writers Manual reiterates that where there is a pollutant with a WLA from a TMDL, a permit writer must develop WQBELs or other permit requirements consistent with the assumptions and requirements of any WLA that has been assigned to the discharge as part of an approved TMDL per 40 CFR section 122.44(d)(1)(vii)(B). Therefore, WQBELs have been included in the draft tentative order for those pollutants with TMDL WLAs assigned to Permittees’ MS4 discharges. The analysis contained in the TMDLs and the fact sheet for the tentative order provides the support and rationale for the determination that discharges from the MS4 have the reasonable potential to cause or contribute to excursion above water quality standards in the receiving water. (Attachment F).</p>	
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Trash

<p>Trash</p>	<p>The LA County Flood Control District lost its appeal recently in the lawsuit regarding exceedances at the Wardlow Mass Emission Monitoring Station. In the Decision, the Court explicitly stated that the Federal Clean Water Act does not address the source of pollutants, but rather that the owner of a point source discharge is legally responsible</p>	<p>City of Burbank</p>	<p>The Board agrees that permittees have ultimate authority and responsibility to prohibit, prevent, or otherwise control discharges that enter and exit the portions of the MS4 for which they are owners and/or operators. Even if the permittees do not themselves generate the pollutants entering/exiting their MS4s, the permittees are nevertheless responsible for ensuring that the pollutants do not reach receiving waters through their MS4. As the commenter notes, the 9th Circuit Court of Appeals recently held that the “the Clean Water Act does not distinguish between those who add and those who convey what is added by others - the Act is indifferent to the originator of water pollution.” (NRDC v. County of Los Angeles (2011))</p>	<p>None</p>
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	<p>for the quality of the water leaving its outfall. Clearly, the District is legally responsible for any trash that enters its catch basins and the draft MS4 Permit Tentative Order must also make this distinction clear</p>		<p>673 F.3d 880, 900.)</p> <p>Flood control districts, like the LACFCD, have the authority and responsibility to implement structural and/or institutional controls to prevent trash from entering the MS4, and/or leaving the MS4. This notwithstanding, the Regional Board recognizes that trash, and the way in which it is regulated through TMDLs in the LA Region, is unique, and unlike other pollutants such as bacteria and metals. The Regional Board has established a framework for trash TMDLs that uses a land-based approach to compliance determination. This is possible, given the Regional Board’s working definition of “trash” for purposes of trash TMDLs, and given that there are mechanisms to capture and quantify 100% of accumulated trash within a jurisdiction prior to its discharge to the MS4. This allows compliance determination to focus on jurisdictional areas.</p> <p>However, flood control districts in the LA Region, such as LACFCD, own and retain control over large portions of the MS4 to which storm water and non-storm water from jurisdictions in the region is discharged and, which ultimately discharge to receiving waters. As such, the flood control districts share responsibility for ensuring that the MS4 is operated and maintained in such a way as to meet permit provisions to implement TMDL WLAs for trash. Many of the compliance strategies identified in the region’s trash TMDLs rely upon installing and maintaining structural BMPs within the physical infrastructure of the MS4. Therefore, the flood control districts should support wherever possible, municipalities efforts to implement such BMPs to achieve TMDL requirements.</p>	
<p>Trash</p>	<p>This section discusses the enforcement of water quality based effluent limitations for trash TMDLs, but is not consistent with the language included in the adopted trash</p>	<p>County of Los Angeles (Comment 42); City of Malibu</p>	<p>Permittees may achieve compliance with trash TMDLs in several ways, including through the installation of full capture devices. Part VI.E.5.b clearly outlines how compliance is to be determined where a Permittee elects to comply via the installation of full capture devices. Specifically, Parts VI.E.5.b.i.(1)(c)(i)-(ii) state that, “[a] Permittee shall be</p>	<p>None.</p>

	<p>TMDLs, which allows for installation of full capture devices as a compliance method. For consistency, include or at minimum, reference, language describing the various compliance methods per the approved trash TMDLs.</p> <p>Add the following new subparagraph iii.: “iii. Subparagraphs i. ii. do not apply to Permittees who have installed approved, full capture systems throughout their jurisdictional area covered by the Trash TMDLs.”</p>		<p>deemed in compliance with its final effluent limitation if it demonstrates that all drainage areas under its jurisdiction and/or authority are serviced by appropriate certified full capture systems...” and “[a] Permittee shall be deemed in compliance with its interim effluent limitations, where applicable, by demonstrating that full capture systems treat the percentage of the drainage areas in the watershed that corresponds to the required trash abatement.” The provisions contained in Part VI.A.14.b were originally included in amendments to the 2001 Order adopted by this Board in 2009 (R4-2009-0130) incorporating the Los Angeles River Watershed Trash TMDL into the permit.</p>	
Trash	<p>Section VI.E.5.b.i.2.b on Pg. 119, Footnote 43 Please clarify that it is a 30-day collection period since the footnote comes before the first mention of it. Suggest adding “30-day period as discussed further” to the condition.</p>	City of Malibu	<p>The permit is clear; the sentence following the footnote states that the DGR shall be determined from direct measurement of trash deposited in the drainage area during any thirty-day period...”</p>	None
Trash	<p>Recommend not listing specific water bodies in part E.5.b.(c) on page 118 because then it risks becoming obsolete if new TMDLs are established for trash, or if they are reconsidered. However, if Board staff determines to leave the lists, then please add Santa Monica Bay to the list.</p>	<p>LA Permit Group (Comment 17 & 32); City of Torrance (Comment 66), South Bay Cities; Peninsula Cities (Comment 60)</p>	<p>Santa Monica Bay was inadvertently omitted from the list and has been added to part E.5.b.(i)(1)(c). If new TMDLs are established for trash in the future, or if existing TMDLs are reconsidered, the permit will be modified pursuant to the provision in Part VI.A.7.a.iv. for permit reopener and modification as a result of future amendments to the Basin Plan, including the adoption or reconsideration of a TMDL.</p>	<p>Santa Monica Bay was added to the list in Part E.5.b.(i)(1)(c).</p>
Trash	<p>Substitute “MS4 conveyance system” not “drainage area” when discussing compliance</p>	<p>City of Torrance (Comments 67 and 68), South</p>	<p>The use of “drainage area” is appropriate. While the full capture systems are installed in the MS4, their purpose is to capture trash generated within the drainage area serviced by</p>	None

	with a trash TMDL via the full capture system method.	Bay Cities, Peninsula Cities (Comments 34 and 61)	the MS4 that would otherwise be discharged through the MS4 to receiving waters.	
Trash	The intent of the DGR is to obtain a measure of the effectiveness of institutional controls. Institutional controls are those measures/programs that adjust human behavior, in this case not contributing to stormwater pollution. These are typically long term programs and their results are not immediate. Prescribing an annual DGR is not sensible since representative data collection may not be realized. Therefore, the DGR or similar exercise to quantify institutional controls should be done for two consecutive years during the permit 5-year cycle.	City of Los Angeles (Comment 66)	An annual DGR is necessary to determine compliance with the trash effluent limitations, which are expressed as an annual load. However, the order allows permittees to propose a less frequent period for recalculation of the DGR subject to approval by the Regional Board Executive Officer (see Part VI.E.5.b.i.(2)(b)). Additionally,	None
Trash	Section VI.E.5.c.i on page 122, states that the compliance report is due October 31, 2012; while Attachment E, Section XIX TMDL Reporting, pg. E-56 states that a report is due December 15, 2013. Please revise the dates to be consistent.	City of Los Angeles (Comment 67), City of Torrance (Comment 69), South Bay Cities, Peninsula Cities (Comment 62)	The annual reporting date is December 15th; the date has been changed to December 15, 2013.	Date changed to December 15, 2013
Trash TMDLs	Trash TMDLs typically provide that the zero trash objective is functionally achieved so long as certified full capture devices treat up to the 1-year, 1-hour storm. Yet the enforcement provisions for trash TMDLs	Peninsula Cities (Comment 20)	Permittees may achieve compliance with trash TMDLs in several ways, including through the installation of full capture devices. Part VI.E.5.b clearly outlines how compliance is to be determined where a Permittee elects to comply via the installation of full capture devices. Specifically, Parts VI.E.5.b.i.(1)(c)(i)-(ii) state that, “[a] Permittee shall be deemed in compliance with its final effluent limitation if it	None

	<p>indicates that violations are limited to the days of a storm event of greater than 0.25 inches.</p> <p>Please clarify how this provision with respect to enforcement will apply in instances where a Permittee has complied with a final trash TMDL via installation of certified full capture devices which are not designed to control a storm event of greater than the 1-year, 1-hour storm</p>		<p>demonstrates that all drainage areas under its jurisdiction and/or authority are serviced by appropriate certified full capture systems...” and “[a] Permittee shall be deemed in compliance with its interim effluent limitations, where applicable, by demonstrating that full capture systems treat the percentage of the drainage areas in the watershed that corresponds to the required trash abatement.” The provisions contained in Part VI.A.14.b were originally included in amendments to the 2001 Order adopted by this Board in 2009 (R4-2009-0130) incorporating the Los Angeles River Watershed Trash TMDL into the permit.</p>	
MFAC/TMRP	<p>MFAC and TMRP should be an option available to the Los Angeles River.</p>	<p>LA Permit Group (Comment 34)</p>	<p>MFAC and TMRP are applied in cases where non-point sources are significant contributors to the trash impairment. Per the Los Angeles River TMDL, “non-point sources, i.e. direct deposition of trash by people or wind into the water body is a de minimus source of trash loading to the LA River.” Therefore, these options are not applicable.</p>	<p>None</p>
Full capture systems	<p>For reporting compliance based on Full Capture Systems, what is the significance of needing to know "the drainage areas addressed by these installations?" Unfortunately, record keeping in Burbank is limited to the location and size of City-owned catch basins. A drainage study would need to be done to define these drainage areas. As such, we do not believe this requirement serves a purpose in regards to full capture system installations and their intended function.</p>	<p>LA Permit Group (Comment 35)</p>	<p>Full capture systems are assumed to remove all the trash generated in the areas draining to (or served by) them. In order to determine the degree of compliance it is necessary to determine how much of a jurisdiction’s area is being served by full capture systems. This is the purpose for requiring information on “the drainage area addressed by these installations.”</p> <p>However, where information on drainage area is not available, an estimate of the percentage of the drainage area covered by full capture systems may be obtained from the ratio of the number of catch basins with full capture installations to the total number of catch basins within a jurisdictional area.</p>	<p>None</p>
Monitoring	<p>Please ensure the monitoring</p>	<p>City of Santa</p>	<p>Monitoring and reporting requirements for trash are cross-</p>	<p>None</p>

and Reporting Requirements	and reporting requirements of Part VI.E.5 are cross referenced; also please add monitoring should be part of an integrated monitoring plan	Clarita (Comment 53)	referenced in Attachment E, Part III.H.2. Additionally, Attachment E, Part IV makes it clear that an integrated monitoring program (i.e., IMP or CIMP) must address all TMDL and non-TMDL monitoring requirements of the Order, which includes those for trash.	
Compliance with Trash TMDLs	Section E.5.b.i(2) (118) appears to indicate that cities installing lesser effective partial control devices may be eligible for a determinate of full compliance while those cities such as Downey that installed the full capture system would not be. This can and should be remedied by including the partial installation of full-capture devices in combination with institutional control as satisfying this item.	City of Downey; City of Monterey Park	Permittees may use combined compliance approaches that include both full capture systems and partial capture devices and institutional controls per Part VI.E.5.b.i.(3).	None
Final Numeric Limits	Cities are concerned that the final TMDL goals will be strict numeric limits. For the purpose of this MS4 permit, it is requested that the final numeric limits be listed as iterative adaptive goals and that as the final date of the implementation period approaches, the Basin Plan be re-opened to review the progress to date and make a determination at that time whether to establish strict numeric limits or a continuation of the iterative adaptive process	Cities of Downey, Norwalk	The decision to reconsider TMDLs that have been incorporated into the Basin Plan, including the timing of such reconsideration, is outside the scope of this permitting action. The tentative order includes opportunities to review progress toward achieving interim and final WQBELs during the permit term, and evaluate the effectiveness of Permittees' storm water management programs and, where applicable, Watershed Management Programs. On the basis of this review and evaluation, the Regional Water Board may consider whether it would be appropriate to allow a BMP based approach for demonstrating compliance with final WQBELs applicable to storm water in a subsequent permit cycle.	None
Numeric WQBELs	Requiring adherence to strict numeric water quality limits for compliance with final TMDL objectives does not	Peninsula Cities	The tentative order provides Permittees with time to identify and implement measures for achieving the WQBELs, consistent with the implementation schedules adopted by the Regional Water Board for the TMDLs.	None

	acknowledge the scientific uncertainty and limitations in the data and models used to adopt the TMDLs in the first place, and does not address the difficulties inherent in developing cost-effective measures for achieving the limits		Comments regarding scientific uncertainty or limitations in the data and models used to establish the TMDLs are outside the scope of this action. Uncertainty and limitations in the data and models was addressed in the adoption of the TMDLs.	
Numeric Limits	The statement in the Fact Sheet (p. F-80) that an “NPDES permit should incorporate the WLAs as numeric WQBELs, where feasible,” does not follow from the CWA or the regulations.	County of Los Angeles (Comment 200)	That is incorrect. Clean Water Act section 402(p)(3)(B)(iii) requires permits for discharges from municipal storm sewers to “require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design, and engineering methods, <i>and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.</i> ” [Emphasis added.] The Clean Water Act provides the Regional Board, to the same extent as the Administrator of USEPA, the discretion to determine what controls are appropriate to protect water quality. (See <i>Defenders of Wildlife v. Browner</i> (1999) 191 F.3d 1159, 1166. Compliance with the TMDLs is necessary to achieve compliance with water quality standards. The statement is also consistent with USEPA guidance.	None
Numeric Limits	The inclusion of numeric limits in the form of numeric WQBELs or RWLs, as a matter of law, exceed the MEP standard and State law and policy.	City of Signal Hill	That is incorrect. Clean Water Act section 402(p)(3)(B)(iii) requires permits for discharges from municipal storm sewers to “require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design, and engineering methods, <i>and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.</i> ” [Emphasis added.] The Clean Water Act provides the Regional Board, to the same extent as the Administrator of USEPA, the discretion to determine what controls are appropriate to protect water quality. See <i>Defenders of Wildlife v. Browner</i> , 191 F.3d 1159, 1166 (1999). Compliance with the TMDLs is necessary to achieve compliance with water quality	None

			<p>standards.</p> <p>The inclusion of numeric limits does not cause the permit to be more stringent than federal law. Federal law authorizes both narrative and numeric effluent limitations to meet state water quality standards. Thus, the inclusion of numeric limits as discharge specifications in an NPDES permit in order to achieve compliance with water quality standards is not a more stringent requirement than the inclusion of BMP based permit requirements to achieve water quality standards. While expressed differently, both types of provisions have the same goal, which are to achieve compliance with water quality standards.</p> <p>The Board also notes that Order No. 01-182 required permittees to comply with receiving water limitations. The receiving water limitations are the water quality standards for a specific water body, which are generally expressed numerically. In the judicial litigation concerning Order No. 01-182, the Los Angeles Superior Court found that the terms of Order No. 01-182, including the receiving water limitations, were consistent with the MEP standard. (See <i>In re Los Angeles County Municipal Storm Water Permit Litigation</i> (Sup. Ct. Los Angeles County, March 24, 2005, Case No. BS 080548), Statement of Decision from Phase I Trial on Petitions for Writ of Mandate, pp. 4-9.)</p>	
<p>Numeric Limits</p>	<p>All permit provisions that do not allow compliance through the submission of Watershed Management Plans where reasonable assurance can be provided or through the use of full-capture measures for trash TMDLs are requirements that cannot be possibly be complied with. The inclusion of such numeric limits is not supported by sufficient findings, the</p>	<p>City of Signal Hill</p>	<p>The Fact Sheet includes detailed information supporting the basis for inclusion of WQBELs.</p>	<p>None</p>

<p>Numeric Limits</p>	<p>evidence, or applicable law. The permit should be revised to be consistent with the MEP standard by specifically allowing for a “safe harbor” or BMP deemed compliance approach through an iterative/adaptive management process. It has long been recognized by the State Board, as well as the courts and USEPA, that the use of MEP compliant BMPs is the only means by which municipalities have to comply with MS4 permit terms.</p>	<p>City of Signal Hill</p>	<p>The commenter misstates the applicable law. Clean Water Act section 402(p)(3)(B)(iii) requires permits for discharges from municipal storm sewers to “require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design, and engineering methods, <i>and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.</i>” [Emphasis added.] The Clean Water Act provides the Regional Board, to the same extent as the Administrator of USEPA, the discretion to determine what controls are appropriate to protect water quality. (See <i>Defenders of Wildlife v. Browner</i> (1999) 191 F.3d 1159, 1166). The use of WQBELs, including numeric limits, is authorized by the Clean Water Act.</p> <p>Further, the Board is not required to provide a “safe harbor.” During the litigation on the 2001 MS4 permit, the Los Angeles Superior Court upheld the RWL provisions in the 2001 permit, stating: “In sum, the Regional Board acted within its authority when it included Parts 2.1 and 2.2 in the Permit without a ‘safe harbor,’ whether or not compliance therewith requires efforts that exceed the ‘MEP’ standard.” (<i>In re L.A. Cnty. Mun. Storm Water Permit Litig.</i> (L.A. Super Ct., No. BS 080548, Mar. 24, 2005) Statement of Decision from Phase I Trial on Petitions for Writ of Mandate, pp. 405, 7.) The state court’s decision was confirmed in 2011 by the Ninth Circuit’s decision in <i>NRDC v. County of Los Angeles</i> (2011) 673 F.3d 880, 886.)</p>	<p>None</p>
<p>Numeric Limits</p>	<p>Municipalities must develop BMPs that exceed the MEP standard to meet numeric limits. This requires municipalities to develop and implement impracticable BMPs that are not technically and/or economically feasible.</p>	<p>City of Signal Hill</p>	<p>The comment misstates the applicable law. Clean Water Act section 402(p)(3)(B)(iii) requires permits for discharges from municipal storm sewers to “require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design, and engineering methods, <i>and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.</i>” [Emphasis added.] The Clean Water Act provides the Regional Board, to the same extent as the Administrator of USEPA, the discretion</p>	<p>None</p>

			<p>to determine what controls are appropriate to protect water quality. (See <i>Defenders of Wildlife v. Browner</i> (1999) 191 F.3d 1159, 1166.) The use of WQBELs, including numeric limits, is authorized by the Clean Water Act.</p> <p>The inclusion of numeric limits does not cause the permit to be more stringent than federal law. Federal law authorizes both narrative and numeric effluent limitations to meet state water quality standards. Thus, the inclusion of numeric limits as discharge specifications in an NPDES permit in order to achieve compliance with water quality standards is not a more stringent requirement than the inclusion of BMP based permit requirements to achieve water quality standards. While expressed differently, both types of provisions have the same goal, which are to achieve compliance with water quality standards.</p> <p>The tentative order includes opportunities to review progress toward achieving interim and final WQBELs during the permit term, and evaluate the effectiveness of Permittees’ storm water management programs and, where applicable, Watershed Management Programs. On the basis of this review and evaluation, the Regional Water Board will consider whether it would be appropriate to allow a BMP based approach for demonstrating compliance with final WQBELs applicable to storm water.</p> <p>Further, there are elements of technical and economic feasibility inherent in the MEP standard. While the term “maximum extent practicable” is not specifically defined in the Clean Water Act or its implementing regulations, USEPA, courts, and the State Water Board have addressed what constitutes MEP. MEP is not a one-size fits all approach. Rather, MEP is an evolving, flexible, and advancing concept, which considers practicability. This includes technical and economic practicability. Compliance with the MEP standard involves applying BMPs that are effective in reducing or eliminating</p>	
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			<p>the discharge of pollutants in storm water to receiving waters. BMP development is a dynamic process, and the menu of BMPs may require changes over time as experience is gained and/or the state of the science and art progresses. MEP is the cumulative effect of implementing, evaluating, and making corresponding changes to a variety of technically appropriate and economically practicable BMPs, ensuring that the most appropriate controls are implemented in the most effective manner. The State Water Board has held that “MEP requires permittees to choose effective BMPs, and to reject applicable BMPs only where other effective BMPs will serve the same purpose, the BMPs would not be technically feasible, or the costs would be prohibitive.” (State Water Board Order WQ 2000-11.)</p>	
Numeric Limits	<p>The ultimate outcome of imposing numeric effluent limits on municipalities will not be to improve water quality, but instead to increase litigation and attorneys fees in fighting enforcement actions and citizen suits, and, as well, will subject municipalities to unnecessary penalty claims, including mandatory minimum penalties.</p>	City of Signal Hill	<p>Clean Water Act section 402(p)(3)(B)(iii) requires permits for discharges from municipal storm sewers to “require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design, and engineering methods, <i>and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.</i>” [Emphasis added.] The Clean Water Act provides the Regional Board, to the same extent as the Administrator of USEPA, the discretion to determine what controls are appropriate to protect water quality. See <i>Defenders of Wildlife v. Browner</i>, 191 F.3d 1159, 1166 (1999). The use of WQBELs, including numeric limits, is authorized by the Clean Water Act and the tentative order includes findings to support the conclusion that such limits are necessary to control pollutants and meet water quality standards.</p> <p>The tentative permit provides flexibility to permittees on how to demonstrate compliance with the permit terms.</p>	None
Numeric Limits	<p>CASQA's proposal adding language to Part V is a step in the right direction in attempting to developing a deemed compliance approach. However,</p>	City of Signal Hill	<p>The tentative order includes opportunities to review progress toward achieving interim and final WQBELs during the permit term, and evaluate the effectiveness of Permittees’ storm water management programs and, where applicable, Watershed Management Programs. On the basis of this review and</p>	None

	<p>the City believes that any such MEP BMP deemed compliance approach must equally extend to WLAs from TMDLs to be incorporated into the Permit, and also believe that CASQA's language should be expanded to make clear that good faith compliance with the iterative/adaptive management process is, in fact, compliance with all applicable receiving water limits and WQBELs or other numeric effluent limits, including "action levels."</p>		<p>evaluation, the Regional Water Board will consider whether it would be appropriate to allow a BMP based approach for demonstrating compliance with final WQBELs applicable to storm water in the future.</p>	
Numeric Limits	<p>Requiring strict compliance with numeric limits in a MS4 permit in most cases is requiring compliance with terms that are impossible to achieve, given the variability of the potential sources of pollutants in urban runoff, as well as the unpredictability of the climate. The Clean Water Act does not require permittees to do the impossible and comply with unachievable numeric limits. The permit, as a matter of law, cannot impose terms that are unobtainable. Therefore, numeric limits must be stricken.</p>	City of Signal Hill	<p>Clean Water Act section 402(p)(3)(B)(iii) requires permits for discharges from municipal storm sewers to “require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design, and engineering methods, <i>and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.</i>” [Emphasis added.] The Clean Water Act provides the Regional Board, to the same extent as the Administrator of USEPA, the discretion to determine what controls are appropriate to protect water quality. (See <i>Defenders of Wildlife v. Browner</i> (1999) 191 F.3d 1159, 1166). The use of WQBELs, including numeric limits, is authorized by the Clean Water Act and the tentative order includes findings to support the conclusion that such limits are necessary to control pollutants and meet water quality standards.</p> <p>The tentative permit provides flexibility to permittees on how to demonstrate compliance with the permit terms.</p>	None
Numeric Limits	<p>The Board failed to take into account the practicability of complying with many of the numeric limitations set forth in</p>	BILD	<p>Clean Water Act section 402(p)(3)(B)(iii) requires permits for discharges from municipal storm sewers to “require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control</p>	None

	<p>the Draft Permit. Thus, there is no substantial evidence to support a finding of practicability concerning most if not all of the NELs reflected in the Draft Permit. The Board should therefore make it plain that the numeric effluent limits in the final permit should be employed only as part of an iterative process leading toward compliance with all such NELs.</p>		<p>techniques and system, design, and engineering methods, <i>and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.</i>” [Emphasis added.] The Clean Water Act provides the Regional Board, to the same extent as the Administrator of USEPA, the discretion to determine what controls are appropriate to protect water quality. (See <i>Defenders of Wildlife v. Browner</i> (1999) 191 F.3d 1159, 1166 [“Under that discretionary provision, the EPA has the authority to determine that ensuring strict compliance with state water quality standards is necessary to control pollutants.”].) In this case, the state has authority to require controls, including compliance with WQBELs, to comply with water quality standards. The TMDLs took into account practicability in evaluating reasonably foreseeable methods of compliance with the TMDLs.</p> <p>The Board has also taken into account practicability by providing compliance schedules, where authorized.</p>	
<p>California Water Code sections 13000, 13263, and 13241</p>	<p>Permit terms requiring compliance with numeric limits, irrespective of the MEP standard, along with the new “discharge prohibition” terms, are required to be adopted in accordance with the requirements of California Water Code sections 13000, 13263 and 13241.</p>	<p>City of Signal Hill</p>	<p>The requirements of the permit are not more stringent than federal law and, therefore, compliance with Water Code section 13241 on its own or through Water Code section 13263 is not required. Water Code section 13241 requires the Regional Water Board to consider certain factors, including economic considerations, in the adoption of water quality objectives. Water Code section 13263 requires the Board to take into consideration the provisions of section 13241 in adopting waste discharge requirements. In <i>City of Burbank v. State Water Resources Control Board</i> (2005) 35 Cal.4th 613, the California Supreme Court considered whether regional water boards must comply with section 13241 when issuing waste discharge requirements under section 13263(a) by taking into account the costs a permittee will incur in complying with the permit requirements. The Court concluded that whether it is necessary to consider such cost information “depends on whether those restrictions meet or exceed the requirements of the federal Clean Water Act.” (<i>Id.</i> at p. 627.) The Court ruled that regional water boards may not consider the factors in</p>	<p>None</p>

			<p>section 13241, including economics, to justify imposing pollutant restrictions that are less stringent than the applicable federal law requires. (<i>Id.</i> at p. 626-627 Nevertheless, the Fact Sheet includes a detailed analysis of the factors set forth in Water Code section 13241.</p> <p>Further, Water Code section 13000 does not impose an affirmative duty on the Board to consider the statements of legislative intent found in section 13000. See <i>City of Arcadia v. State Water Resources Control Board</i> (2011) 191 Cal.App.4th 156, 176.) A statute containing “a general statement of legislative intent...does not impose any affirmative duty that would be enforceable...” (<i>Shamsian v. Department of Conservation</i> (2006) 136 Cal.App.4th 621, 640-641; see also <i>Common Cause v. Board of Supervisors</i> (1989) 49 Cal.3d 432, 444 [“the precatory declaration of intent expressed in the statute must be read in context” and “cannot be viewed as independently creating substantive duties...in addition to those imposed by the regulation”].)</p>	
<p>Compliance Schedules</p>	<p>Compliance schedules set out in TMDLs implementing California Toxics Rule criteria are not authorized by the Inland Surface Water Plan.</p>	<p>Environmental Groups</p>	<p>The State Water Board's Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits ("Compliance Schedule Policy" or "Policy ") does not apply to MS4 permits because the Compliance Schedule Policy only applies to NPDES permits with effluent limitations established under CWA section 301(b)(1)(C): "[T]his Policy shall apply to all NPDES permits adopted by the Water Boards that must comply with [CWA] section 301(b)(1)(C) and that are modified or reissued after the effective date of the Policy." MS4 permits are not subject to CWA section 301(b)(1)(C). Rather, effluent limitations in MS4 permits are established pursuant to CWA section 402(p)(3)(B), and, if applicable, section 303(d).</p> <p>Further, the Inland Surface Water Plan is also inapplicable as, by its own terms, it does not apply to storm water.</p> <p>All permits must implement the applicable water quality control plan (i.e. Basin Plan), including any applicable TMDL</p>	<p>None</p>

			implementation programs (Cal. Water Code §§ 13263, 13377).	
Compliance Schedules	Where TMDL deadlines have already passed, allowing Permittees additional time to comply with the WLAs as a term of the re-issued MS4 Permit will not lead to compliance “as soon as possible,” which is in violation of 40 CFR § 122.27. The TMDL schedules therefore cannot be incorporated into the MS4 Permit.	Environmental Groups	The tentative permit does not propose to incorporate compliance schedules into the permit for TMDL deadlines that have passed; rather it sets forth the process for a permittee to seek a time schedule order pursuant to Water Code section 13301. The Regional Board has authority to issue TSOs in appropriate circumstances. Prior to issuance of such an order, the Regional Board must consider available information, including public comments, to determine whether to issue a TSO and what conditions should be included.	None
Compliance Schedules	Any implementation schedule set forth in an applicable TMDL that allows for more than 1 year to achieve compliance and lacks interim deadlines cannot be incorporated into the MS4 Permit as an NPDES compliance schedule. This specifically applies to the implementation schedules set out in the Malibu Creek Bacteria TMDL, the SMBBB TMDLs, and the LA River Indicator Bacteria TMDL. These compliance schedules must either be modified to comply with the regulations or eliminated in their entirety.	Environmental Groups	The compliance schedules in the permit are consistent with the TMDL implementation plans set forth in the Basin Plan. USEPA anticipates that MS4 permits will include compliance schedules based on an implementation plan: "Where a TMDL has been established and there is an accompanying implementation plan that provides a schedule for an MS4 to implement the TMDL, the permitting authority should consider the schedule as it decides whether and how to establish enforceable interim requirements and interim dates in the permit." See “Memorandum, Revisions to the November 22, 2002 Memorandum ‘Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs’,” dated November 12, 2010. Also, all permits must implement the applicable water quality control plan (i.e. Basin Plan), including any applicable TMDL implementation programs (Cal. Water Code §§ 13263, 13377).	None
Compliance Schedules	Part VI.E.(2)(d)(i)(4) unlawfully provides a compliance determination for interim limits where a Permittee is merely implementing a Watershed Management Plan rather than actually achieving	Environmental Groups	All permits must implement the applicable water quality control plan (i.e. Basin Plan), including any applicable TMDL implementation programs (Cal. Water Code §§ 13263, 13377). The proposed watershed management programs cannot be used to avoid compliance with the TMDLs in accordance with the implementation plans in those TMDLs. Watershed Management Programs must include a Reasonable Assurance	None

	the defined interim limits. This violates the requirements for interim deadlines in 40 CFR § 122.47. The permit nowhere references 40 C.F.R. § 122.47, nor does the permit explain how the requirements of this regulation have been met.		Analysis that demonstrates that the watershed control measures proposed are sufficient to achieve interim and final WQBELs and RWL consistent with applicable compliance schedules. If this reasonable assurance is not demonstrated, Permittees may not use a WMP to demonstrate compliance with interim WQBELs and RWLs. Furthermore, Permittees must evaluate the effectiveness of their WMP and modify the WMP as necessary to ensure that interim WQBELs and RWL are achieved consistent with applicable compliance schedules.	
Compliance Schedules	Each TMDL requirement with a future final compliance deadline must include interim numeric benchmarks throughout the process of implementation. This is the only way to track a Permittee’s progress and evaluate BMPs and progress toward final compliance along the way, and is consistent with the requirements that compliance schedules include interim deadlines (40 CFR § 122.47(a)(3).)	Environmental Groups	As authorized and/or required by Water Code sections 13263 and 13377, the compliance schedules are consistent with the TMDLs and contain interim requirements where appropriate.	None
Compliance Schedules	Each Permittee should be required to report on BMP implementation, BMP maintenance activities, and water quality monitoring results (which some TMDLs require independently) on an annual basis to the Board. The requirement that this information merely be available for inspection by the Board is insufficient to ensure that the public can access information related to permit implementation and	Environmental Groups	The Regional Board is not required to require permittees to submit all information. However, the permit requires annual reporting in Attachment E-MRP, which will include information on permittees’ implementation of BMPs, and reporting of all monitoring results. Any information submitted to the Regional Board in these annual reports is available to the public.	None

	compliance.			
Compliance Determination				
Detected Exceedances	As the Draft Permit now reads, any and all detected exceedances of numeric WQBELs will apparently be deemed ipso facto or presumptive permit violations. The Board should expressly state in the final permit that exceedances found through monitoring will not constitute ipso facto or even presumptive permit violations. Instead, the final permit should state that detectable exceedances should be used to trigger iteration concerning the selection and deployment of BMPs where reasonably practicable.	BILD	The Regional Board does not expect that any measured numeric exceedance will always constitute a permit violation by a particular permittee. In determining whether a numeric exceedance constitutes a permit violation by a particular permittee, the Regional Board would consider all the available information, including other sources and the nature of the exceedance and the applicable requirement of the permit. The Regional Board does not intend that numeric limitations operate as “ipso facto” or “presumptive enforceable permit violations”, but does not need to clarify the permit because it already provides clarification.	None
Causation	If the final permit is not clarified to state that any measured numeric exceedances do not constitute permit violations, the final permit will violate basic due process principles because the permit would fail to take into account causation as a necessary element of finding an MS4 permittee liable for a violation, particularly in regard to influent to the MS4 which is completely impossible to arrest. MS4 permittees largely in no way cause the water quality problems. It is unreasonable to penalize MS4 permittees or	BILD	The Regional Board does not expect that any measured numeric exceedance will always constitute a permit violation by a particular permittee. In determining whether a numeric exceedance constitutes a permit violation by a particular permittee, the Regional Board would consider all the available information, including other sources and the nature of the exceedance and the applicable requirement of the permit. The Regional Board does not intend that numeric limitations operate as “ipso facto” or “presumptive enforceable permit violations”, but does not need to clarify the permit because it already provides clarification.	None

	<p>developers for the fate and disposition of natural loads, because they do constitute an anthropogenic “addition” of a pollutant to receiving waters. Similarly, other influent into an MS4 – even if it is anthropogenic in its origins – is simply impossible to prevent or reduce in many storm events. If the Board intends that any numeric limitations should operate as thresholds for ipso facto or presumptive enforceable permit violations, then the Board would need to devise a way to incorporate a principle similar to the one that led to 40 C.F.R. § 122.45(g) – the federal “gross-net” regulations for industrial facilities.</p>			
<p>Commingled Discharges</p>	<p>This section should make clear that where there is a commingled discharge to a receiving water, the Permittees who contribute to the commingled discharge are required to work together to assure that the WLA is met, but no one Permittee is responsible for meeting the WLA itself or is responsible for addressing pollutants that come from another Permittee’s MS4. Part VI.E.2.b.iii. needs to be clarified to make clear that it is not intended to conflict with</p>	<p>County of Los Angeles (Comment 117)</p>	<p>The Permit is adequately clear on this issue.</p>	<p>None</p>

	Part VI.E.2.b.ii. or 40 CFR § 122.26(a)(3)(vi).			
Commingled Discharges	For clarification, Part VI.E.2.b.iv. should be modified to provide that where a commingled discharge exceeds applicable water quality standard, all Permittees that have contributed to the commingled discharge are responsible for determining the source(s) of the pollutants.	County of Los Angeles (Comment 118)	The Permit adequately addresses this comment by allowing permittees who may have commingled discharges to establish a plan for determining compliance.	None
Commingled Discharges	Where a Permittee receives commingled discharges from upstream permitted and non-permitted sources, the Permittee should be allowed to show that its discharge contains pollutants, the sources over which the Permittee does not have control. Recommend adding a subparagraph 4 to Part VI.E.2.b.iv. that says, “Demonstrate that its discharge contains contributions from other sources, including but not limited to discharges of other Permittees, which have the potential to have caused or contributed to the exceedance at issue.	County of Los Angeles (Comment 119)	The Regional Board agrees that information about other sources will be considered by the Board in determining compliance.	None
Commingled Discharge	Part VI.E.2.b.v.(1) is not consistent with the sections for Interim WQBELs and/or RWLs or for Final WQBELs and/or RWLs. Recommendation Revise to read: “Demonstrate	County of Los Angeles (Comment 120)	The Regional Board agrees with the comment and has revised the permit accordingly.	None

	<p>that there is no discharge from the Permittee’s MS4 into the applicable receiving water during the time period subject to the water quality based effluent limitation and/or receiving water limitation for the pollutant(s) associated with a specific TMDL;”</p>			
<p>Joint Responsibility</p>	<p>The Permit improperly imposes joint liability and joint and several liability for WQBEL and receiving water exceedances. It is both unlawful and inequitable to make a permittee liable for the actions of other permittees over which it has no control. A party is responsible only for its own discharges or those over which it has control. There is no provision for joint liability under either the California Water Code or the Clean Water Act.</p>	<p>Cities of Agoura Hills, Artesia, Beverly Hills, Hidden Hills, La Mirada, Monrovia, Norwalk, Rancho Palos Verdes, San Marino, South El Monte, and Westlake Village</p>	<p>The Board does not agree with the comment. All persons who discharge any pollutant to waters of the United States must obtain an NPDES permit. (<i>See</i> 40 CFR § 122.21.) In this case, 86 entities are subject to the NPDES permits, and discharge to a common conveyance system and receiving waters. The Permit implements the requirements of the Clean Water Act, which require the dischargers to meet water quality standards to the “maximum extent practicable” and to comply with “such other provisions as the Administrator or the State determines appropriate for the control of such discharges” and to prohibit discharges of non-stormwater to the MS4, with certain conditional exceptions. Permittees are responsible for complying with the permit. (<i>See</i> 40 C.F.R. § 122.41(a) [“Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action.”].)</p> <p>The permit covers a large geographic area. Permittees that discharge to a common outfall where the discharges commingle in the receiving water may be responsible for violations of the receiving water limitations. Once the Board determines that there is a violation of the receiving water limitations, or other conditions of the permit, based on monitoring reports and/or other information, it is up to the permittee to demonstrate that they are not responsible for the specific violation. The permit sets forth methods for a discharger to demonstrate that they are not responsible. The dischargers are responsible for complying with the terms of the permit; they cannot use another commingled discharger to shield themselves from responsibility for the discharge where they provide no</p>	<p>None</p>

			<p>information to show that they did not cause or contribute to the discharge. This view is consistent with the Clean Water Act which imposes strict liability and requires dischargers to establish and maintain records, sample and monitor discharges and report the results to the Water Board. (See, e.g., 33 U.S.C. § 1318(a); 40 C.F.R. §122.41(j); 122.48 & 123.5.) This system of self-reporting is critical to the NPDES program, which “fundamentally relies” upon it. (See <i>U.S. v. Brittain</i> (10th Cir. 1991) 931 F.2d 1413, 1416.) In addition, the federal regulations contemplate that co-permittees will be responsible for developing management programs and controls involving inter-governmental coordination to reduce the discharge of pollutants (40 C.F.R. § 122.26(d)(2)(iv)), must agree to accept roles and responsibilities necessary to ensure effective coordination (40 C.F.R. § 122.26(d)(2)(vii)); and must have legal authority and agreement with other dischargers to control contribution of pollutants from one portion of the MS4 to another (40 C.F.R. § 122.26(d)(2)(i)(D)). The Clean Water Act puts the onus on the permittee to have sufficient control over its system to prevent discharges that are not compliant. (See, e.g., 40 C.F.R. § 122.26(d)(2)(iv)(B)(3) [application for permit must show how permittees will investigate any part of their system with a reasonable potential for contributing pollutants into the system from other sources].)</p> <p>The Clean Water Act and applicable regulations set up a system that is consistent with the application of joint and several liability in nuisance actions. It is initially up to the harmed party to provide proof of the harm. Where a party asserts that they are not responsible for the harm, or it can be apportioned, the party must provide proof of the apportionment of the harm. (See, e.g., Restatement (Second) of Torts § 433B. 433A.) In addition, the Restatement states that damages for harm are to be apportioned among two or more causes where there are distinct harms or there is a reasonable basis for determining the contribution of each cause to a single harm.)See, e.g., Restatement (Second of Torts, §433A.)</p>	
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			The Board agrees, however, that co-permittees need only comply with permit conditions relating to discharges from the MS4 for which they are operators. So, for example, one co-permittee is not required to implement or correct best management practices employed by another co-permittee. (See, 40 CFR § 122.26(a)(3)(vi).)	
Joint Responsibility	The issue of imposing liability for contributions to "commingled discharges" of certain constituents, such as bacteria, is especially problematic because there is no method of determining who has contributed what to an exceedance.	Cities of Agoura Hills, Artesia, Beverly Hills, Hidden Hills, La Mirada, Monrovia, Norwalk, Rancho Palos Verdes, San Marino, South El Monte, and Westlake Village	The federal regulations contemplate that co-permittees will be responsible for developing management programs and controls involving inter-governmental coordination to reduce the discharge of pollutants (40 C.F.R. § 122.26(d)(2)(iv)), must agree to accept roles and responsibilities necessary to ensure effective coordination (40 C.F.R. § 122.26(d)(2)(vii)); and must have legal authority and agreement with other dischargers to control contribution of pollutants from one portion of the MS4 to another (40 C.F.R. § 122.26(d)(2)(i)(D)). The Clean Water Act puts the onus on the permittee to have sufficient control over its system to prevent discharges that are not compliant. (See, e.g., 40 C.F.R. § 122.26(d)(2)(iv)(B)(3) [application for permit must show how permittees will investigate any part of their system with a reasonable potential for contributing pollutants into the system from other sources].) The TMDLs for bacteria address coordination between permittees.	None
Joint Responsibility	For receiving water body exceedances, the Permit should specify that the burden is on the Regional Board to show that any permittee's discharge caused or contributed to that exceedance. Requiring permittees to prove they did not cause or contribute an exceedance is both inequitable and unlawful. Permittees should not be required to prove they did not do something when the Regional Board has failed to	Cities of Agoura Hills, Artesia, Beverly Hills, Hidden Hills, La Mirada, Monrovia, Norwalk, Rancho Palos Verdes, San Marino, South El Monte, and Westlake Village	Permittees that discharge to a common outfall where the discharges comingle in the receiving water may be responsible for violations of the receiving water limits. Once the Water Board determines that there is a violation of the receiving water limits, or other conditions of the permit, based on monitoring reports and/or other information, it is up to the permittee to demonstrate that they are not responsible for the specific violation. The permit sets forth methods for a discharger to demonstrate that they are not responsible. The dischargers are responsible for complying with the terms of the permit; they cannot use another commingled discharger to shield themselves from responsibility for the discharge where they provide no information to show that they did not cause or contribute to the discharge. This view is consistent with the	None

	<p>raise even a rebuttable presumption that the contamination results from a particular permittee's actions.</p>		<p>Clean Water Act which imposes strict liability and requires dischargers to establish and maintain records, sample and monitor discharges and report the results to the Water Board. (See, e.g., 33 U.S.C. § 1318(a); 40 C.F.R. §122.41(j); 122.48 & 123.5.) This system of self-reporting is critical to the NPDES program, which “fundamentally relies” upon it. (See <i>U.S. v. Brittain</i> (10th Cir. 1991) 931 F.2d 1413, 1416.)</p>	
<p>Joint Responsibility</p>	<p>Requiring a permittee involved in a comingled discharge to prove it did not cause or contribute to an alleged exceedance violates basic tenants of due process of law and is fundamentally unenforceable. Under both the CWA and the Porter-Cologne Act, the Board has the burden of proofing liability against an individual Permittee, regardless of whether or not there is a comingled exceedance. There is no such thing as "presumed," nor joint and several liability under either the CWA or the Porter-Cologne Act. The concept of "presumed guilt" is not an accepted principle of justice within the American System of Jurisprudence, and violates basic tenants of due process of law, plain statutory requirements and well-established precedent, to presume a Permittee is in violation of the Permit and subject to penalties wherever there is a comingled exceedance. As such, all such</p>	<p>City of Signal Hill</p>	<p>The Board does not agree with the comment. All persons who discharge any pollutant to waters of the United States must obtain an NPDES permit. (See 40 CFR § 122.21.) In this case, 86 entities are subject to the NPDES permits, and discharge to a common conveyance system and receiving waters. The Permit implements the requirements of the Clean Water Act, which require the dischargers to meet water quality standards to the “maximum extent practicable” and to comply with “such other provisions as the Administrator or the State determines appropriate for the control of such discharges” and to prohibit discharges of non-stormwater to the MS4 system, with certain conditional exceptions. Permittees are responsible for complying with the permit. (See 40 C.F.R. § 122.41(a) [“Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action.”].)</p> <p>The permit covers a large geographic area. Permittees that discharge to a common outfall where the discharges comeingle in the receiving water may be responsible for violations of the receiving water limits. Once the Board determines that there is a violation of the receiving water limits, or other conditions of the permit, based on monitoring reports and/or other information, it is up to the permittee to demonstrate that they are not responsible for the specific violation. The permit sets forth methods for a discharger to demonstrate that they are not responsible. The dischargers are responsible for complying with the terms of the permit; they cannot use another comingled discharger to shield themselves from responsibility for the discharge where they provide no information to show that they did not cause or contribute to the discharge. This view is consistent with the Clean Water Act</p>	<p>None</p>

	<p>terms must be deleted from the Proposed Permit.</p>		<p>which imposes strict liability and requires dischargers to establish and maintain records, sample and monitor discharges and report the results to the Water Board. (<i>See, e.g.</i>, 33 U.S.C. § 1318(a); 40 C.F.R. §122.41(j); 122.48 & 123.5.) This system of self-reporting is critical to the NPDES program, which “fundamentally relies” upon it. (<i>See U.S. v. Brittain</i> (10th Cir. 1991) 931 F.2d 1413, 1416.)</p> <p>In addition, the federal regulations contemplate that co-permittees will be responsible for developing management programs and controls involving inter-governmental coordination to reduce the discharge of pollutants (40 C.F.R. § 122.26(d)(2)(iv)), must agree to accept roles and responsibilities necessary to ensure effective coordination (40 C.F.R. § 122.26(d)(2)(vii)); and must have legal authority and agreement with other dischargers to control contribution of pollutants from one portion of the MS4 to another (40 C.F.R. § 122.26(d)(2)(i)(D)). The Clean Water Act puts the onus on the permittee to have sufficient control over its system to prevent discharges that are not compliant. (<i>See, e.g.</i>, 40 C.F.R. § 122.26(d)(2)(iv)(B)(3) [application for permit must show how permittees will investigate any part of their system with a reasonable potential for contributing pollutants into the system from other sources].)</p> <p>The Clean Water Act and applicable regulations set up a system that is consistent with the application of joint and several liability in nuisance actions. It is initially up to the harmed party to provide proof of the harm. Where a party asserts that they are not responsible for the harm, or it can be apportioned, the party must provide proof of the apportionment of the harm. (<i>See, e.g.</i>, Restatement (Second) of Torts §§ 433B, 433A.) In addition, the Restatement states that damages for harm are to be apportioned among two or more causes where there are distinct harms or there is a reasonable basis for determining the contribution of each cause to a single harm. (<i>See, e.g.</i>, Restatement (Second) of Torts, § 433A.)</p>	
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			The Board agrees, however, that co-permittees need only comply with permit conditions relating to discharges from the MS4 for which they are operators. So, for example, one co-permittee is not required to implement or correct best management practices employed by another co-permittee. (See, 40 CFR § 122.26(a)(3)(vi).)	
Joint Responsibility	The definition of “joint responsibility” is potentially internally contradictory and should be clarified to ensure compliance with existing waste load allocations and other Clean Water Act requirements. Finding J.1. should be revised to be consistent with Part IV.E.2.b.ii. that it is the Permittee who must show its discharge is not responsible for causing or contributing to an exceedance. The Board should also explicitly state that it is a Permittees’ responsibility to address any contribution to an exceedance, not only exceedances for which they are solely responsible.	Environmental Groups	Permittees that discharge to a common outfall where the discharges comingle in the receiving water may be responsible for violations of the receiving water limits. Once the Board determines that there is a violation of the receiving water limits, or other conditions of the permit, based on monitoring reports and/or other information, it is up to the permittee to demonstrate that they are not responsible for the specific violation. The permit sets forth methods for a discharger to demonstrate that they are not responsible. The dischargers are responsible for complying with the terms of the permit; they cannot use another commingled discharger to shield themselves from responsibility for the discharge where they provide no information to show that they did not cause or contribute to the discharge. This view is consistent with the Clean Water Act which imposes strict liability and requires dischargers to establish and maintain records, sample and monitor discharges and report the results to the Board. (See, e.g., 33 U.S.C. § 1318(a); 40 C.F.R. §122.41(j); 122.48 & 123.5.) This system of self-reporting is critical to the NPDES program, which “fundamentally relies” upon it. (See <i>U.S. v. Brittain</i> (10th Cir. 1991) 931 F.2d 1413, 1416.)	None
<i>RWLs Addressed by a TMDL</i>				
Receiving Water Limitations Addressed by a TMDL	While it is not the Board’s intention, Part VI.E.2.c.iii. would open Permittees up to third-party lawsuits. Therefore, the reference to a TSO should be replaced with the Watershed Management Program.	County of Los Angeles (Comment 121)	This portion of the permit addresses TMDLs where compliance deadlines have passed. The Regional Board may not include a compliance schedule in the permit, but consistent with the Water Code may provide a TSO to provide additional time to comply.	None
<i>Final QBELs and/or RWLs</i>				
Final	Final waste load allocations	Cities of Agoura	The Regional Board adopted TMDLs in accordance with	None

<p>WQBELs and/or RWLs</p>	<p>should not be incorporated into the Permit, especially for TMDLs that have been rushed through due to the Browner consent decree with the understanding that they would be refined over time with reopeners as new information becomes available.</p>	<p>Hills, Artesia, Beverly Hills, Hidden Hills, La Mirada, Monrovia, Norwalk, Rancho Palos Verdes, San Marino, South El Monte, and Westlake Village</p>	<p>applicable laws and must incorporate those TMDLs into the permit. If TMDLs are reopened and implementation plans change, the permit may be reopened to make appropriate revisions.</p>	
<p>Final WQBELs and/or RWLs</p>	<p>The County and the LACFCD are concerned that final WLAs for State-adopted TMDLs have been incorporated as numeric effluent limitations that apply at the point of discharge from the MS4 and, where applicable, as receiving water limitations. The more appropriate approach is to incorporate interim and final WLAs as BMP-based effluent limitations defined as TMDL Control Measures required in the Watershed Management Program.</p>	<p>LACFCD (Comments 15 & 35); County of Los Angeles (Comments 11 & 122)</p>	<p>Clean Water Act section 402(p)(3)(B)(iii) requires permits for discharges from municipal storm sewers to “require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design, and engineering methods, <i>and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.</i>” [Emphasis added.] The Clean Water Act provides the Regional Board, to the same extent as the Administrator of USEPA, the discretion to determine what controls are appropriate to protect water quality. (See <i>Defenders of Wildlife v. Browner</i> (1999) 191 F.3d 1159, 1166.). Compliance with the TMDLs is necessary to achieve compliance with water quality standards.</p> <p>USEPA has stated that MS4 "permit conditions must provide for attainment of applicable water quality standards (including designated uses), allocations of pollutant loads established by a TMDL, and timing requirements for implementation of a TMDL." (See, e.g., Phase II Stormwater Regulations, Final Rule, 64 Fed. Reg. 68722, 68737 (addressing small MS4s).) USEPA has set forth in guidance regarding MS4 permits, that such permits must require compliance with applicable TMDLs to meet water quality standards. See “Revisions to the November 22, 2002 Memorandum "Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Requirements Based on Those WLAs." USEPA Office of Water, Nov. 10,</p>	<p>None</p>

<p>Final WQBELs and/or RWLs</p>	<p>It is an abuse of discretion to express final TMDL WLAs as strict numeric WQBELs and/or RWLs in the permit. The Board has not demonstrated that it is feasible to reflect the final WQBELs as numeric limits. In addition, the Board has not demonstrated that compliance with numeric WQBELs or WLAs is feasible. The Board also has not analyzed the costs of complying with TMDLs, including during the TMDL development process. The Board also did not analyze whether the means to comply with the TMDLs were cost-effective. The permit should be revised to implement final TMDL WLAs using BMPs. Alternatively, the Board should insert a new section VI.E.2.e.ii. that states: “Two years before the compliance deadline for an applicable final water quality-based effluent limitation and/or final receiving water limitation, Regional Board shall evaluate progress made by Permittees toward compliance with the standard, including review of the results from Permittees’ adaptive management process (VI.C.6.), to determine whether the compliance timeline should remain unchanged, or if the</p>	<p>LACFCD (Comment 36); County of Los Angeles (Comment 123)</p>	<p>2010. The Regional Board does not agree that it is an abuse of discretion to express final TMDL WLAs as numeric WQBELs. (See <i>Defenders of Wildlife v. Browner</i> (1999) 191 F.3d 1159, 1166.) The Regional Board does agree that in certain circumstances it should consider whether implementation of BMPs is sufficient to achieve compliance with the TMDL WLAs. The tentative permit has been revised to provide for review two years before the final compliance deadlines to evaluate whether a BMP based approach to final WQBELs is supportable.</p>	<p>Revision made to part VI.A.7.a</p>
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	Order should be revised to incorporate a new compliance timeline.”			
Final WQBELs and/or RWLs	Los Angeles Region MS4 dischargers should not be held to enforceable numeric effluent limits when discharges into the MS4, such as from Caltrans and construction sites, are not being held to the same standard.	LACFCD (Comment 36); County of Los Angeles (Comment 123)	The tentative permit incorporates TMDLs, including numeric WQBELs where feasible to implement the TMDL WLAs. Such provisions are appropriate to control the pollutants subject to the TMDLs. (See <i>Defenders of Wildlife v. Browner</i> (1999) 191 F.3d 1159, 1166.).	None
Final WQBELs and/or RWLs	It is an abuse of discretion for the Permit to contain WQBELs and WLAs that are applicable after the expiration of the Permit. The fact sheet and draft Permit contain no reason for doing so. It is also not good policy, as it could restrict the flexibility of the Board and the Permittees to address these matters in subsequent permits. LACFCD recommends deleting all references to final WQBELs or final WLAs that are not applicable until after the five year termination date of the permit.	LACFCD (Comment 37); County of Los Angeles (Comment 124)	The Regional Board does not agree that it is an abuse of discretion to include numeric WQBELs that are applicable after the expiration of the permit. See <i>Defenders of Wildlife v. Browner</i> (1999) 191 F.3d 1159, 1166. The permit is required to implement the TMDLs, including the implementation plans. The Board and the permittees flexibility is not limited since the permit includes appropriate reopeners and those final WQBELs are not enforceable during the term of this permit.	None
<i>USEPA Established TMDLs</i>				
USEPA TMDLs	Part VI.E.3 illegally exempts permittees from complying with numeric WLAs established in USEPA adopted TMDLs. This violates 40 CFR § 122.44(d)(1)(vii)(B), which requires that NPDES permits be consistent with existing, applicable WLAs. Because TMDLs established by USEPA	Environmental Groups	Clean Water Act section 402(p)(3)(B)(iii) requires permits for discharges from municipal storm sewers to “require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design, and engineering methods, <i>and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.</i> ” [Emphasis added.] The Clean Water Act provides the Regional Board, to the same extent as the Administrator of USEPA, the discretion to determine what controls are	None

	include numeric WLAs, the permit must include numeric WQBELs consistent with those WLAs. Permittees must be required to comply with all existing, applicable WLAs, regardless of the adopting agency.		appropriate to protect water quality. See <i>Defenders of Wildlife v. Browner</i> , 191 F.3d 1159, 1166 (1999). Compliance with the TMDLs is necessary to achieve compliance with water quality standards but inclusion of numeric WQBELs is not required.	
USEPA TMDLs	<u>Section VI.E.3.c.iv.1 USEPA Established TMDLs and all VI.E.3 on Pg. 115</u> Conditions for compliance with Section VI.E.2.e.i.1-3 should apply to show compliance with EPA-Established TMDLs.	City of Malibu	The conditions in Part VI.E.2.e.i. apply to all TMDLs – both those adopted by the State and those established by USEPA.	None
Interaction between minimum control measures and watershed management program for USEPA Established TMDLs	It is not clear from the permit whether the intent is for cities such as Norwalk, which are subject to a USEPA TMDL, to be given the option of implementing the Minimum Control Measures (as all other Permittees are) or developing a Watershed Management Program. Paragraph VI.E.3.a (p. 114) appears to require cities subject to USEPA TMDLs to use only the Watershed Management Program option, which conflicts with Paragraph VI.C.1.b (p. 45) where "participation in a Watershed Management Program is voluntary..."	City of Norwalk	Permittees do not have to participate in a WMP, however, where a Permittee is subject to an EPA established TMDL, the WMP provides a mechanism for demonstrating compliance with the numeric WLAs assigned to the Permittee. If a Permittee does not elect to develop a WMP, it may alternatively demonstrate compliance with the numeric WLAs directly through monitoring data collected through the MRP.	None
<i>State Adopted TMDLs where Final Compliance Deadlines have Passed</i>				
State Adopted TMDLs where	There is no evidence that Permittees can comply with	LACFCD (Comment 38);	There is only a small subset of the 33 TMDLs for which final compliance deadlines have passed, and only three of these are	None

final compliance deadlines have passed	final WLAs set forth in those TMDLs whose final compliance dates have passed. Also, at the time the TMDLs were adopted, there was no evidence submitted that the TMDLs could be reached on the adopted, final compliance dates. If the Board is going to require compliance with state adopted TMDLs where the final compliance deadline has passed, then the Board should require compliance through implementation of BMPs whether than numeric effluent limits. LACFCD recommended new language.	County of Los Angeles (Comment 125)	<p>significant in terms of MS4 discharges. In all three cases, the final deadlines that have passed are related to non-storm water discharges from the MS4, not storm water discharges. The CWA requires that non-storm water discharges through the MS4 are effectively prohibited to the extent that they are a source of pollutants to receiving waters. Furthermore, these final deadlines occurred between 3½ to 6 years ago in most cases. Additionally, Permittees have been on notice since 2006 regarding the manner in which these TMDL requirements would be incorporated into the permit. The LA County MS4 Permit was reopened in 2006 and again in 2007 to include these very requirements.</p> <p>Further, a TSO would provide additional time to comply, where justified, rather than requiring immediate compliance with the final WQBELs.</p>	
State Adopted TMDLs where final compliance deadlines have passed	Should the TSO option remain, allow Permittees at least 3 months from the date of the Permit adoption to request a TSO.	County of Los Angeles (Comment 126)	The time line for submittal of a TSO is 45 days after the adoption of the permit so that the requests for TSOs will be received prior to the effective date of the permit.	None
State Adopted TMDLs where final compliance deadlines have passed	The process to request a TSO and its approval by the Board can potentially last a long time. Should the TSO option remain, the Permittees should be considered in compliance with the applicable RWLs and/or WQBELs from the initiation of the application process to its final approval.	County of Los Angeles (Comment 127)	There is only a small subset of the 33 TMDLs for which final compliance deadlines have passed, and only three of these are significant in terms of MS4 discharges. In all three cases, the final deadlines that have passed are related to non-storm water discharges from the MS4, not storm water discharges. The CWA requires that non-storm water discharges through the MS4 are effectively prohibited to the extent that they are a source of pollutants to receiving waters. Furthermore, these final deadlines occurred between 3½ to 6 years ago in most cases. Additionally, Permittees have been on notice since 2006 regarding the manner in which these TMDL requirements would be incorporated into the permit. The LA County MS4 Permit was reopened in 2006 and again in 2007 to include these very requirements. The tentative permit provides a	None

			reasonable time to make the requests.	
State Adopted TMDLs where final compliance deadlines have passed	The draft Permit does not include any provisions for once TMDL limits are achieved. Language should be added to state that compliance monitoring will be discontinued when the subject waterbody is delisted from the Clean Water Act section 303(d) list.	County of Los Angeles (Comment 129)	Monitoring of pollutants addressed by a TMDL must continue to ensure that MS4 discharges continue to be controlled such that the applicable WQBELs and RWLs continue to be attained. However, the MRP allows for reductions in monitoring frequency in some situations subject to Executive Officer approval.	None
TSOs	<p>Rather than request a Time Schedule Order for State Adopted TMDLs where final compliance deadlines have passed, Permittees should have the option of revising the Watershed Management Plan to include the elements listed in VI.E.4.d. Some TMDL final compliance deadlines will fall near the end of the next permit term or once it has expired while the permit is still in effect because the LARWQCB has not adopted a new permit (as is the case right now). The Permittees would not have requested a TSO within 45 days of Permit adoption because at the time the Permittees were in compliance with the interim objectives.</p> <p>Strike the phrase “within 45 days of Order adoption”</p> <p>Add the additional language to the end of VI.E.b.:</p>	Peninsula Cities (Comment 33); South Bay Cities; City of Los Angeles (Comment 65)	<p>While the tentative order specifies a process for requesting a TSO for WQBELs where the final deadlines have already passed, according to Cal. Water Code section 13300, whenever the Los Angeles Water Board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the Board, including final WQBELs, the Board may require the discharger to submit for approval of the board, with such modifications as it may deem necessary, a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements. It is therefore not necessary to change the tentative order.</p> <p>For all types of NPDES permits, compliance schedules included in permits must ensure that: (1) effluent limitations are “consistent with the assumptions and requirements of any available wasteload allocation” set forth in the TMDL; and (2) compliance with effluent limitations is achieved as soon as possible (40 CFR §§ 122.44(d)(1)(vii)(B) and 122.47(a)(1)). The compliance schedule must also have an enforceable endpoint and cannot be open-ended. In addition, Water Code sections 13263 and 13377 require that permits be consistent with water quality control plans. Therefore, the tentative order cannot specify a timeframe for achieving compliance that is longer than that provided for in the TMDLs adopted as basin plan amendments.</p>	None

	“or include the information listed in VI.E.4.d.i-vi in its Watershed Management Plan			
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California Regional Water Quality Control Board, Los Angeles Region
Los Angeles County MS4 Permit
Response to Comments on the Tentative Order
TOTAL MAXIMUM DAILY LOADS (SPECIFIC) MATRIX

Section/Topic	Comment Summary	Commenter(s)	Response	Change Made
General				
TMDL Reopeners	Several TMDLs, such as the Machado lake Nutrients TMDL, provide for reconsideration prior to final compliance deadlines. The tentative order proposal does not reflect this.	County of Los Angeles (Comment 128 & 220)	The permit includes a provision that allows the Board to reopen and modify the permit to incorporate provisions as a result of future amendments to the Basin Plan, such as the reconsideration of a TMDL. See Part VI.A.7.a.iv. It is not necessary to include the dates for scheduled TMDL reconsiderations in the permit, as these reconsiderations occur through the basin plan amendment process as opposed to the permitting process.	None.
Multiple TMDLs				
Bacteria TMDLs	The Bacteria TMDL reconsiderations adopted for Santa Monica Bay Beaches, Ballona Creek and Marina del Rey Harbor on June 7, 2012 does not differentiate between dry or wet weather geometric means. The geometric mean is calculated using all data regardless of weather conditions with a compliance deadline of July 15, 2021. This change should be reflected in the Permit.	City of Los Angeles (Comments 134, 137, 139, 141, 142, 144)	<p>The Board acknowledges the changes to the calculation of the geometric mean, which were adopted by the Board on June 7, 2012 as part of the Bacterial TMDL reconsiderations. However, the revised Bacterial TMDLs are not in effect until approved by the State Board, OAL and USEPA. The tentative order will be revised however to state that upon the effective date of the revisions to the TMDL, the water quality based effluent limitations and receiving water limitations shall be as adopted by this Regional Board in its reconsideration of the TMDL. Attachment M, Parts A, D.1, E.3, and F.1 will be revised to include the updated water quality based effluent limitations and receiving water limitations to which Permittees will be subject once the revisions to the TMDLs are in effect.</p> <p>Additionally, note that the permit includes a provision that allows the Board to reopen and modify the permit to incorporate provisions as a result of future amendments to the Basin Plan, such as a new or revised water quality objective or the adoption or reconsideration of a TMDL.</p>	Yes, Attachment M, Parts A, D.1, E.3 and F.1

			See Part VI.A.7.a.iv. This provision can be utilized to reopen the permit to make necessary changes.	
Bacteria TMDLs	The Bacteria TMDL reconsiderations adopted for Santa Monica Bay Beaches, Ballona Creek and Marina del Rey Harbor on June 7, 2012, increased the allowable exceedance days during the winter dry period (November 1 to March 31) from 3 to 9 and from 1 to 2 for shoreline monitoring stations under daily and weekly sampling, respectively. The tables should be updated to reflect this change.	City of Los Angeles (Comments 135, 140, 143); County of Los Angeles (Comment 225)	<p>The Board acknowledges the changes it adopted on June 7, 2012, with regard to the winter dry weather allowable exceedance days in the Bacterial TMDLs. However, the revised Bacterial TMDLs are not in effect until approved by the State Board, OAL and USEPA. The tentative order will be revised however to state that upon the effective date of the revisions to the TMDL, the water quality based effluent limitations and receiving water limitations shall be as adopted by this Regional Board in its reconsideration of the TMDL. Attachment M, Parts A, D.1, E.3, and F.1 will be revised to include the updated water quality based effluent limitations and receiving water limitations to which Permittees will be subject once the revisions to the TMDLs are in effect.</p> <p>Additionally, note that the permit includes a provision that allows the Board to reopen and modify the permit to incorporate provisions as a result of future amendments to the Basin Plan, such as a new or revised water quality objective or the adoption or reconsideration of a TMDL. See Part VI.A.7.a.iv. This provision can be utilized to reopen the permit to make necessary changes.</p>	Yes, Attachment M, Parts A, D.1, E.3 and F.1
Ballona Creek Estuary Toxic Pollutants TMDL and Dominguez Channel and Harbors Toxics TMDL	Both the Ballona Creek Estuary Toxics and Dominguez Channel and Harbors Toxics TMDLs assign mass-based sediment waste load allocations (WLAs) to storm water. The WLAs were developed to address elevated levels of pollutants in bed sediment. The loading capacities and corresponding WLAs in the TMDLs represent the mass of pollutants associated with the sediments that settle on the bottom of the water bodies, which is a subset of what is discharged. The Tentative Order assign MS4	City of Los Angeles Memo	<p>In its memo, the City proposed WLAs based on Total Discharged Sediment for both Ballona Creek Estuary and Los Angeles and Long Beach Harbors.</p> <p>With respect to the Ballona Creek Estuary TMDL, the WLAs proposed by the City would increase the allowable loading to the Ballona Creek Estuary. In the Ballona Creek Estuary TMDL, the loading capacity was calculated based on the assumption that the metals and the organic pollutants are associated with the fine grain particles entrained in storm runoff. Based on this assumption, the loading capacity was calculated by multiplying the average annual deposition of fine sediment, defined as a grain size of 0.0625 millimeters</p>	None

	<p>effluent limitations set equal to the TMDL WLAs and includes language indicating the WLAs apply to sediment-bound pollutants that settle in the estuary. However, additional clarity based on the allowable discharged loads would be helpful to develop implementation plans and evaluate compliance utilizing suspended sediment data.</p>		<p>or smaller, by the numeric sediment targets. The City proposed a loading capacity based on the total amount of sediment discharged multiplied by the numeric sediment targets, which results in an increase of the contaminant loading. Therefore, no change was made to the tentative Order.</p> <p>With respect to the Los Angeles and Long Beach Harbors TMDL, the total settleable sediment loading discharged into the listed water bodies was estimated through modeling. These loading rates may be refined through the collection of additional data or special studies to determine the site specific sediment deposition rates. The City of Los Angeles has the opportunity to conduct special studies before the TMDL is reconsidered in six years and before compliance with the final sediment water quality-based effluent limitations is required.</p>	
<p>Trash TMDLs</p>	<p>With respect to the Los Angeles River Trash TMDL, the Los Angeles Flood Control District is not listed as a responsible agency since the scope of its participation is limited solely to issuing permits and not reducing waste load allocations.</p> <p>Similar to the reasoning used with respect to the Los Angeles River Trash TMDL, the Los Angeles Flood Control District should not be listed as a responsible agency for all trash TMDLs. Therefore, remove the LACFCD as a Permittee under all trash TMDLs.</p>	<p>LACFCD (Comment 77)</p>	<p>As the owner and operator of much of the MS4 that ultimately discharges storm water and non-stormwater containing pollutants such as trash, the LACFCD is appropriately named as a responsible agency for the trash TMDLs. LACFCD is responsible for the pollutants that enter and exit the portions of the MS4 for which it is an owner and/operator. The LACFCD has the authority and responsibility to implement structural controls in the MS4 (i.e. full capture and partial capture devices) to prevent trash from entering the MS4, and/or being discharged from the MS4. Additionally, the LACFCD has the authority and responsibility to implement institutional controls in the MS4 (e.g. visual inspections and maintenance/clean-out of catch basins and channels). This notwithstanding, the Board recognizes that trash, and the way in which it is regulated through TMDLs in the LA Region, is unique, and unlike other pollutants such as bacteria and metals. The Regional Board has established a framework for trash TMDLs that uses a land-based approach to compliance determination. This is possible, given the</p>	<p>None</p>

			<p>Regional Board’s working definition of “trash” for purposes of trash TMDLs, and given that there are mechanisms to capture and quantify 100% of accumulated trash within a jurisdiction prior to its discharge from the MS4. This allows compliance determination to focus on jurisdictional areas.</p> <p>However, the LACFCD owns and controls significant portions of the MS4 to which storm water and non-stormwater from jurisdictions in the region is discharged and, which ultimately discharge to receiving waters. As such, the LACFCD shares responsibility for ensuring that the MS4 is operated and maintained in such a way as to meet federal water quality requirements, including TMDL WLAs. Many of the compliance strategies identified in the region’s trash TMDLs rely upon installing and maintaining structural BMPs within the physical infrastructure of the MS4. Therefore, the LACFCD should support wherever possible, municipalities efforts to implement such BMPs to achieve TMDL requirements.</p>	
<i>Santa Clara River WMA</i>				
Santa Clara River Nitrogen Compounds TMDL	Since the impairment for the Santa Clara River for Nitrogen Compounds was removed from the 303(d) list, the TMDL should not be included in the MS4 Permit. Therefore, remove all references to the Santa Clara River Nitrogen Compounds TMDL from the MS4 Permit.	County of Los Angeles (Comments 176, 221)	The Santa Clara River Nitrogen Compounds TMDL is still part of the Los Angeles Region Basin Plan. Therefore, water quality-based effluent limitations for the LA MS4 Permit, must be consistent with the assumptions and requirements of all available TMDL WLAs.	None
Santa Clara River Nitrogen Compounds TMDL	Both USEPA and Los Angeles Region’s Basin Plan are used for reach designations. To be consistent, continue to use the reach designations as shown in the TMDL documents that have been issued.	County of Los Angeles (Comment 224)	The Santa Clara River Nitrogen Compounds TMDL is the only TMDL that uses USEPA’s reach designations. Therefore, to be consistent with the other TMDLs, the Board used the Los Angeles Basin Plan Santa Clara River reach designations and referenced the USEPA Santa Clara River reach designations.	None
Santa Clara River Indicator	The number of compliance days on the two Allowable Exceedance Days tables	City of Santa Clarita	The number of allowable exceedance days in section D.3.a through D.3.c matches the allowable number of	None

<p>Bacteria TMDL</p>	<p>on page L-2 does not match the compliance days in the approved Santa Clara River Bacteria TMDL and adds weekly compliance days. Remove all interpretation of number of exceedance days other than what has been expressed in the original TMDL number of days of exceedances without interpretation or recalculation.</p>	<p>(Comment 5, & 54); LA Permit Group (Comment 36)</p>	<p>exceedance days in the Santa Clara River Bacteria TMDL for reaches 5, 6, and 7. In addition, zero allowable exceedances of the geometric mean objectives is equivalent to complying with the geometric mean objectives.</p> <p>Footnote 3 of Tables 7-36.2 and 7-36.3 of the Santa Clara River Indicator Bacteria TMDL states, “The calculated number of exceedance days assumes that daily sampling is conducted. To determine the number of allowable exceedances for less frequent sampling, a ratio is used.” The ratio used to calculate the number of exceedance days for weekly sampling is: Allowable Exceedance Days for daily sampling / 365 days = Allowable Exceedance Days for weekly sampling / 52 weeks</p>	
<p>Santa Clara River Indicator Bacteria TMDL</p>	<p>There is no discussion that the TMDL allows for load based options, page 7 of the Santa Clara River (SCR) Bacteria TMDL Basin Plan Amendment states that “compliance can alternatively be based on an allowable load.” However, this language is missing from page L-2 of the Draft Permit’s TMDL provisions. The Permit should be consistent with the TMDL Basin Plan Amendment. We request that the statement “compliance can alternatively be based on an allowable load,” be inserted as an alternative for the final effluent limits for the SCR Bacteria TMDL; this would be an alternative for both the single sample and geometric mean objective based WQBELs.</p>	<p>City of Santa Clarita (Comment 5, & 54); BIA/LAV-BILD-CICWQ</p>	<p>The Board agrees that, for wet-weather, Permittees have the option of proposing load-based compliance at MS4 outfalls. Therefore, a new part was added to Attachment L, Part D.4. on page L-2, as follows:</p> <p>4. <u>Permittees may propose wet-weather load-based compliance at MS4 outfalls. The plan shall include an estimate of existing load and the allowable load from MS4 outfalls to attain the allowable number of exceedance days instream. The plan shall include a technically defensible quantitative linkage to the allowable number of exceedance days. The plan shall include quantitative estimates of the water quality benefits provided by the proposed implementation approach.</u></p> <p>Permittees may propose this approach in their Watershed Management Program plans along with appropriate monitoring to determine compliance with the limitations.</p>	<p>Language has been added to Attachment L for the Santa Clara River Bacteria TMDL as indicated.</p>
<p>Lake Elizabeth, Munz Lake,</p>	<p>The Los Angeles County Flood Control District (LACFCD) should not be listed</p>	<p>LACFCD (Comment 76)</p>	<p>The LACFCD is identified in the TMDL Table 7-23.2a as an agency responsible for complying with the trash</p>	<p>None</p>

<p>and Lake Hughs Trash TMDL</p>	<p>as a responsible agency for the Lake Elizabeth, Munz Lake, and Lake Hughes Trash TMDL because these water bodies are located outside of the LACFCD's service area and the TMDLs themselves do not identify the LACFCD as a responsible agency. Therefore, remove the LACFCD as a Permittee under the Lake Elizabeth, Munz Lake, and Lake Hughes Trash TMDL in Table K-1.</p>		<p>reductions under Task No. 4. In the report titled, <i>The County of Los Angeles Trash Total Maximum Daily Load Monitoring and Reporting Plan for Lake Elizabeth, Munz Lake, and Lake Hughes</i>, dated September 4, 2008, its states that “The County is responsible for operating and maintaining the sole storm drain and five catch basins draining to Lake Elizabeth. The storm drain collects runoff from the five catch basins, which are all within the jurisdictional boundaries of the County.” Since there is a storm drain, which is part of the municipal separate storm sewer system, the LACFCD is a responsible agency for Lake Elizabeth. With respect to Munz Lake and Lake Hughes, there are no effluent limitations in the Permit for these water bodies because there are no known discharges from MS4s owned or operated by Permittees covered by this Order.</p>	
<p>Santa Monica Bay WMA</p>				
<p>Table K-2</p>	<p>City of Hermosa Beach is only within one watershed, the Santa Monica Bay Watershed and so should not be shown in italics as a multi-watershed Permittee.</p>	<p>Los Angeles Permit Group (Comment 16)</p>	<p>Regional Water Board staff agrees and will make the correction.</p>	<p>In table K-2 changed Hermosa Beach to non-italicized.</p>
<p>Santa Monica Bay Beaches Bacteria TMDL</p>	<p>The Santa Monica Bay Bacteria TMDL water quality standards do not apply at the effluent discharge (storm drains, creeks, or channels) as stated on Part A.2. Instead, the water quality limitations apply at the point zero mixing zone (runoff discharge and wave wash). The Bureau recommends that the language be changed to “<i>Permittees shall comply with the following final water quality-based limitations at the shoreline monitoring stations designated in the Santa Monica Bay Beaches Bacteria TMDL during ...</i>”</p>	<p>City of Los Angeles (Comment 133)</p>	<p>The WLAs established in the Santa Monica Bay Beaches Bacteria TMDL apply at the wave wash. The Regional Water Board established receiving water limitations, which are consistent with the WLAs in the Santa Monica Bay Beaches Bacteria TMDL. In addition, the Regional Water Board established water quality based effluent limitation based on the bacteria water quality objectives for outfalls that discharge to Santa Monica Bay beaches or directly into Santa Monica Bay. In the bacteria TMDLs, the numeric targets are based on the multi-part bacteriological water quality objectives; therefore, the Permit is consistent with the assumptions of the SMBB Bacteria TMDL. The order allows Permittees to demonstrate compliance with <i>both</i> the receiving water limitations or the water quality based</p>	<p>Language has been revised in Parts VI.E.2.d. and VI.E.2.e.</p>

			effluent limitations in several ways.	
Santa Monica Bay Beaches Bacteria TMDL	Monitoring stations SMB 2-13 and SMB 3-8 provide storm water runoff treatment and diversion and thus the reason for water quality improvement. Also due to unique climate patterns during which this data was collected, it does not ensure that this water quality will remain at these levels. For these reasons these locations should not be subject to antidegradation.	City of Los Angeles (Comment 136)	The annual allowable exceedance days in the permit are based on the waste load allocations as listed in the Santa Monica Bay Beaches Bacteria TMDL. For monitoring stations SMB 2-13 and SMB 3-8, as well as all other permit requirements, the antidegradation provision apply consistent with federal and state antidegradation requirements.	None
Santa Monica Bay Beaches Bacteria TMDL reopener	As part of the Santa Monica Bay Beaches Bacteria TMDL (SMBBB TMDL) reconsideration, the summer dry weather targets must be revised to be consistent with the reference beach/anti-degradation approach established for the SMBBB TMDL and with the extensive data collected over the past seven years since original adoption of the SMBBB TMDL. This data clearly shows that natural and non-point sources result in 10% exceedances during dry weather. Data collected at the reference beach since adoption of the TMDL, as tabulated in Table 3 of the staff report of the proposed revisions to the Basin Plan Amendment, demonstrate that natural conditions associated with freshwater outlets from undeveloped watersheds result in exceedances of the single sample bacteria objectives during both summer and winter dry weather on approximately 10% of the days sampled. Thus the previous Source Analysis in	LA Permit Group (Comment 3)	The comment is outside the scope of the LA MS4 Permit renewal. As noted in the Notice of Opportunity for Public Comment and Notice of Public Hearing dated June 6, 2012, the validity of the TMDLs being incorporated into the permit are not an issue before the Board in this proceeding.	None

	<p>the Basin Plan Amendment adopted by Resolution No. 02-004 which stated that “historical monitoring data from the reference beach indicate no exceedances of the single sample targets during summer dry weather and on average only three percent exceedance during winter dry weather” was incorrect and based on a data set not located at the point zero compliance location. Continued allocation of zero summer dry weather exceedances in the proposed Basin Plan Amendment is in direct conflict with the stated intent to utilize the reference beach/anti-degradation approach and ignores the scientifically demonstrated reality of natural causes and non-point sources of indicator bacteria exceedances.</p> <p>This is a critical issue that was not addressed in the recent reopener. The reference reach approach and the overriding policy that Permittees are not responsible for pollutants outside their control, including natural sources, needs to be included.</p>			
<p>Santa Monica Bay Beaches Bacteria TMDL reopener</p>	<p>Continued use of the zero summer dry weather exceedance level will make compliance with the SMBBB TMDL impossible for the Jurisdictional agencies. This is also in conflict with the intent of the Regional board as expressed in finding 21 of Resolution 2002-022 “that it is not the intent of the Regional Board to require treatment or diversion of natural coastal creeks or to require treatment of natural sources of</p>	<p>LA Permit Group (Comment 4)</p>	<p>The comment is outside the scope of the LA MS4 Permit renewal. As noted in the Notice of Opportunity for Public Comment and Notice of Public Hearing dated June 6, 2012, the validity of the TMDLs being incorporated into the permit are not an issue before the Board in this proceeding.</p>	<p>None</p>

	<p>bacteria from undeveloped areas”.</p> <p>This is a critical issue that was not addressed in the recent reopener. The reference reach approach and the overriding policy that Permittees are not responsible for pollutants outside their control, including natural sources, needs to be included</p>			
<p>Santa Monica Bay Beaches Bacteria Monitoring Plan</p>	<p>The SMBBB TMDL Coordinated Shoreline Monitoring Plan (CSMP) was approved by the Regional Board staff and that CSMP should be incorporated into the TMDL monitoring requirements of the next MS4 Permit. The CSMP established that compliance monitoring would be conducted on a weekly basis, and although some monitoring sites are being monitored on additional days of the week, none of the sites are monitored seven days per week, thus it is highly confusing and misleading to refer to “daily monitoring”. The CSMP established that compliance monitoring would be conducted on a weekly basis, and although some monitoring sites are being monitored on additional days of the week, none of the sites are monitored seven days per week.</p> <p>The problem with sites monitored two days a week has not been corrected. Please provide clarification that this issue could be addressed and would supersede the TMDL if submitted in an integrated monitoring plan. This is critical for summer dry weather and 5-day per week sites.</p>	<p>LA Permit Group (Comment 5)</p>	<p>The Santa Monica Bay Beaches Bacterial TMDLs Coordinated Shoreline Monitoring Plan is incorporated in the Order by reference on page E-9 of the Monitoring and Reporting Program. Permittees may propose modifications to existing shoreline monitoring requirements through an IMP or CIMP consistent with TMDL monitoring requirements, as outlined in Attachment E-MRP.</p>	<p>None</p>

Santa Monica Bay Beaches Bacteria TMDL	In effect the effluent limitations are stricter than the receiving water standards. This is inconsistent with law and creates a situation in which Permittees are out of compliance at the effective date of this permit. Please adjust so that limits are consistent with standards and not exceeding standards.	LA Permit Group (Comment 6); Peninsula Cities (Comment 38); South Bay Cities; City of Torrance (Comment 79)	<p>The Regional Water Board established receiving water limitations, which are consistent with the WLA in the Santa Monica Bay Beaches Bacteria TMDL. The WLAs are defined as an allowable number of exceedance days at the beach monitoring sites. This is the reason the WLAs are included in the permit as receiving water limitations.</p> <p>In addition, the Regional Water Board established water quality based effluent limitation based on the bacteria water quality objectives for outfalls that discharge to Santa Monica Bay. In the bacteria TMDLs, the numeric targets are based on the multi-part bacteriological water quality objectives; therefore, the Permit is consistent with the assumptions and requirements of the SMBB Bacteria TMDL WLAs. The order allows Permittees to demonstrate compliance with <i>both</i> the receiving water limitations or the water quality based effluent limitations in several ways, pursuant to Part VI.E.2.d and VI.E.2.e.</p>	Yes for clarification.
Santa Monica Bay Beaches Bacteria TMDL	The language in Part M.A.2. is incorrect as is the title of the table. As defined in Attachment A, page A-8, Receiving Water Limitations are the applicable numeric or narrative water quality objective criterion or limitation for the receiving water... Thus water quality objectives or water quality standards are those that apply in the receiving water. Consistent with the TMDL, this table identifies the bacteriological objectives as set forth in Chapter 3 of the Basin Plan and serves as the numeric targets for the Santa Monica Bay Beaches Bacteria TMDL.	Peninsula Cities (Comment 39); South Bay Cities; City of Torrance (Comment 80)	The Board disagrees. As defined in the Order, a “Receiving Water Limitation” is any applicable numeric or narrative water quality objective or criterion, or limitation to implement the applicable water quality objective or criterion, for the receiving water as contained in Chapter 3 or 7 of the Basin Plan... Receiving Water Limitations apply and are measured in the receiving waters. In Part M.A.2, the water quality-based effluent limitations apply at outfalls that discharge to Santa Monica Bay.	None
Santa Monica Bay Beaches Bacteria TMDL	Part M.A.3 mistakenly uses the term “receiving water limitations” to refer to “waste load allocations”. In the Santa Monica Bay Bacteria TMDL the term	Peninsula Cities (Comment 40); South Bay	TMDLs, in part, establish waste load allocations (WLAs). The WLAs are then translated into effluent limitations and, where appropriate, receiving water limitations. As is required by 40 CFR section	None

	<p>“allowable exceedance days” is synonymous with “waste load allocations”. The Santa Monica Bay Beaches Bacteria TMDL Basin Plan Amendment Attachment A states that “Waste Load Allocations are expressed as allowable exceedance days”. Throughout A.3 the term “receiving water limitations” should be replaced by the term “waste load allocations.”</p>	<p>Cities; City of Torrance (Comment 81)</p>	<p>122.44(d)(1)(vii)(B), when developing water quality-based effluent limits the permitting authority shall ensure that effluent limits developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, are consistent with the assumptions and requirements of any available TMDL waste load allocation.</p>	
<p>Santa Monica Bay Beaches Bacteria TMDL</p>	<p>While it makes sense for the Jurisdictional Groups previously identified in the TMDLs to work jointly to carry out implementation plans to meet the interim reductions, only the responsible agencies with land use or MS4 tributary to a specific shoreline monitoring location can be held responsible for the final implementation targets to be achieved at each individual compliance location. An additional table is needed showing the responsible agencies for each individual shoreline monitoring location.</p>	<p>LA Permit Group (Comment 7); Peninsula Cities (Comment 15); South Bay Cities; City of Torrance (Comment 82)</p>	<p>The Board agrees that a table or map, which identifies the responsible Permittees for each shoreline monitoring location, would provide clarity. However, this information needs to be developed by the Permittees based on drainage areas and their storm drain networks for each shoreline location. The Permittees are encouraged to provide this information in their Watershed Management Programs.</p>	<p>None</p>
<p>Santa Monica Bay Nearshore and Offshore Debris TMDL</p>	<p>The Permit requires starting the implementation of the Trash Monitoring and Reporting Plan (TMRP) 30 days from receipt of the letter of approval from the Regional Water Board Executive Officer, or the date a plan is established by the Executive Officer. The TMDL itself provides for 6 months, not 30 days, to start implementation, and this requirement is part of the Basin Plan.</p>	<p>County of Los Angeles (Comments 177)</p>	<p>If the TMRP is submitted by September 20, 2012, as required in the TMDL, then implementation of the TMRP will be changed to 6 months from receipt of the letter of approval, as specific in the TMDL. If a Permittee submits the TMRP as part of an IMP or CIMP as outlined in the Order, then implementation of the TMRP implementation will be 30-90 days from receipt of the letter of approval from the Regional Water Board Executive Officer, as specified in the Order.</p>	<p>Changes will be made as specified to the table on page E-50.</p>
<p>Santa Monica Bay Nearshore</p>	<p>The Permit requires TMRP and PMRP results to be submitted by December</p>	<p>County of Los Angeles</p>	<p>The annual reporting deadline in the Permit is December 15th, with the first report due on December 15, 2013.</p>	<p>None</p>

<p>and Offshore Debris TMDL</p>	<p>15, 2013, and annually thereafter. The timeline is unreasonable; the December 2013 report will not have any monitoring results.</p>	<p>(Comment 178)</p>	<p>The reporting schedules for the TMDLs differ from this deadline. However, the Regional Water Board has consolidated, to the extent possible, the reports, in order to reduce the number of reports that Permittees must submit to the Regional Water Boards. If no data is available, then the permittees should indicate that in the report.</p>	
<p>Santa Monica Bay Nearshore and Offshore Debris TMDL</p>	<p>The WLAs in the adopted Santa Monica Bay Nearshore and Offshore Debris TMDL were expressed in terms of percent reduction of trash from Baseline WLA. Board staff have not transferred the Waste Load Allocations as expressed in the TMDL into the MS4 Permit, but have instead calculated annual trash discharge rates for each Permittee based on a calculation using an assumed tributary area. There are very likely to be errors in the tributary areas used in calculating these Waste Load Allocations and correcting them will necessitate reopening the Permit. It makes far more sense for MS4 Permittees to verify and if necessary correct the tributary areas for their individual jurisdictions as part of the development of the Trash Monitoring and Reporting Plans and to simply include in the permit the schedule for percentage reduction from baseline applicable to all Permittees.</p> <p>Eliminate the detailed Permittee-by-Permittee table with annual trash discharge rates in the table and instead create a simple table listing the interim and final waste load allocations on a percentage basis, only.</p>	<p>Peninsula Cities (Comment 65); South Bay Cities; City of Torrance (Comment 83)</p>	<p>The effluent limitations were calculated by multiplying the baseline waste load allocations as listed in Table 9 of the TMDL Staff Report dated, October 25, 2010, by the required percent reductions as listed in Table 7-34.2 of the Basin Plan Amendment.</p> <p>Permittees may implement their TMRPs to obtain site specific trash generation rates during the first two years of the implementation period and, if approved by the Regional Board’s Executive Officer, ultimately use these data to define the trash Baseline Waste Load Allocations.</p>	<p>None</p>

Santa Monica Bay DDT and PCB TMDL	<p>The Santa Monica Bay DDT and PCB TMDL issued by USEPA assigns the waste load allocation as a mass-based waste load allocation to the entire area of the Los Angeles County MS4 based on estimates from limited data on existing stormwater discharges which resulted in a waste load allocation for stormwater that is lower than necessary to meet the TMDL targets, in the case of DDT far lower than necessary. EPA stated that "If additional data indicates that existing stormwater loadings differ from the stormwater waste load allocations defined in the TMDL, the Los Angeles Regional Water Quality Control Board should consider reopening the TMDL to better reflect actual loadings." [USEPA Region IX, SMB TMDL for DDTs and PCBs, 3/26/2012]</p> <p>In order to avoid a situation where the MS4 Permittees would be out of compliance with the MS4 Permit if monitoring data indicate that the actual loading is higher than estimated and to allow time to re-open the TMDL if necessary, recommend as an interim compliance objective WQBELs based on the TMDL numeric targets for the sediment fraction in stormwater of 2.3 ug DDT/g of sediment on an organic carbon basis, and 0.7 ug PCB/g sediment on an organic carbon basis.</p>	LA Permit Group (Comment 8, 9)	The waste load allocations as listed in the Order are consistent with the WLAs assigned by USEPA in the TMDL. If and when the TMDL is revised, either by USEPA or the Regional Water Board, there is a reopener in Part VI.7.a.iv of the Order to address revisions to TMDLs. That reopener provision states that the Order may be modified to incorporate provisions as a result of future amendments to the Basin Plan, such as a new or revised water quality objective or the adoption or reconsideration of a TMDL.	None
Santa Monica Bay DDT and PCB TMDL	The Santa Monica Bay DDT and PCB TMDL issued by USEPA assigns the waste load allocation as a mass-based waste load allocation to the entire area	Peninsula Cities (Comment 16); South Bay	The waste load allocations as listed in the Order are consistent with the WLAs assigned by USEPA in the TMDL. The TMDL states that the waste load allocations should be placed in the MS4 permits as	None

	<p>of the Los Angeles County MS4 based on estimates from limited data from mass emissions stations to which none of the Peninsula cities are tributary. Because the TMDL has been translated into the Permit using only the mass-based waste load allocation applied to the entire area of Los Angeles County, the individual cities will be obligated to wait until the entire LA Basin is in compliance to establish attainment of the TMDL waste load allocations.</p> <p>Include the concentration-based sediment targets from Table 3-1 of the TMDL as concentration-based Waste Load Allocations in the MS4 Permit normalized for organic carbon (OC):</p> <p>DDT: 23 ug/g OC PCBs: 7 ug/g OC</p>	<p>Cities; City of Torrance (Comment 84)</p>	<p>mass-based numeric WQBELs. The TMDL does not provided a mechanism for concentration – based waste load allocations. As part of the Watershed Management Program, the WLAs may be distributed among the Permittees based on their proportional drainage area, upon approval of the Executive Officer.</p>	
<p>Santa Monica Bay DDT and PCB TMDL</p>	<p>Although the Santa Monica Bay DDT and PCB TMDL issued by USEPA assigns the waste load allocation as a mass-based waste load allocation to the entire area of the Los Angeles County MS4, they should be translated as WQBELs in a manner such that watershed management areas, subwatersheds and individual Permittees have a means to demonstrate attainment of the WQBEL. Recommend that the final WLAs be expressed as an annual mass loading per unit area, e.g., per square mile.</p>	<p>LA Permit Group (Comment 10); Peninsula Cities (Comment 16)</p>	<p>As part of the Watershed Management Program, the WLAs may be distributed among the Permittees based on their proportional drainage area, upon approval of the Executive Officer.</p>	<p>None</p>
<p>Malibu Creek Subwatershed</p>				
<p>Malibu Creek Watershed</p>	<p>The Permit requires TMRP and PMRP results to be submitted by December</p>	<p>County of Los Angeles</p>	<p>The annual reporting deadline in the Permit is December 15th, with the first report due on December 15, 2013.</p>	<p>None</p>

Trash TMDL	15, 2013, and annually thereafter. The timeline is unreasonable; the December 2013 report will have limited results.	(Comment 179)	The reporting schedules for the TMDLs differ from this deadline. The Regional Water Board has consolidated, to the extent possible, the reports, in order to reduce the number of reports that Permittees must submit to the Regional Water Boards. If limited data is available, then Permittees should indicate that in the report.	
<i>Ballona Creek Subwatershed</i>				
Ballona Creek Estuary Toxic Pollutants TMDL	Per last column of Table F-7, final compliance date is Jan. 11, 2021. The TMDL BPA allows 15 years after effective date of TMDL for final compliance. Attachment F, page F-82, gives an effective date of 1/11/2008 for this TMDL. It appears that adding 15 years to the effective date of 2008, will make 2023 (not 2021) the final compliance date.	City of Los Angeles (Comment 126)	The effective date for this TMDL is January 11, 2006 as listed on page F-82 in Attachment F. Therefore, the date for final compliance is fifteen years from the effective date, or January 11, 2021.	None
Ballona Creek Trash TMDL	Requirements E.1.d and e on page M-12, are not part of the Ballona Creek Trash TMDL and are not included in any other of the Trash TMDLs incorporated into the permit. Also part E.1.f ignores these requirements for compliance. Please consider removing these two requirements.	City of Los Angeles (Comment 138)	Requirements E.1.d and E.1.e, which require clean out and measurement of trash retained 72 hours after each rain event and every three (3) months during dry weather, are listed in Table 7-3.3. Ballona Creek Trash TMDL: Significant Dates in the Basin Plan. However, per the Ballona Creek TMDL Staff Report, these requirements were intended for the Baseline Monitoring that was conducted for the purpose of deriving more representative waste load allocations for the Ballona Creek Watershed. This Baseline monitoring has since been completed; therefore, these requirements are no longer applicable. Accordingly, Requirements E.1.d and e on page M-12 have been removed.	Requirements E.1.d and E.1.e on page M-12 have been removed.
<i>Dominguez Channel and Greater Harbors Waters WMA</i>				
Machado Lake Trash TMDL	As previously commented, the tentative order assigns a numerical value for trash generation rate of 5334 gallons of uncompressed trash per square mile per year. The Basin Plan Amendment does not use this method.	County of Los Angeles (Comment 226)	The Board disagrees. Page 16 of the Final Staff Report for the Machado Lake Trash TMDL states that "...the Baseline Waste Load Allocation for the responsible jurisdictions is equal to 5334 gallons of uncompressed trash per square mile per year." However, responsible jurisdictions can either choose to use the calculated baseline waste load allocation, or calculate their own	None

			baseline and submit it to the Regional Water Board as part of the TMRP approval process.	
Machado Lake Trash TMDL	The Machado Lake Trash WQBELs listed in the table at B.3 of Attachment N in the Tentative Order appear to have been calculated from preliminary baseline waste load allocations discussed in the July 11, 2007 staff report for the Machado Lake Trash TMDL, rather than from the basin plan amendment. In some cases the point source land area for responsible jurisdictions used in the calculation are incorrect because they were preliminary estimates and subsequent GIS work on the part of responsible agencies has corrected those tributary areas. In other cases some of the jurisdictions may have conducted studies to develop a jurisdiction-specific baseline generation rate. The WQBELs should be expressed as they were in the adopted TMDL WLAs, that is as a percent reduction from baseline and not assign individual baselines to each city but leave that to the individual city's trash reporting and monitoring plan to clarify.	Los Angeles Permit Group (Comment 11)	Attachment N section B.4 clearly states "If a Permittee opts to derive a site specific trash generation rate through its Trash Monitoring and Reporting Plan (TMRP), the baseline limitation will be calculated by multiplying the point source area(s) by the derived trash generation rate(s)." This section addresses the concerns raised by the commenter.	None
Machado Lake Trash TMDL	The WLAs in the adopted Machado Lake Trash TMDL were expressed in terms of percent reduction of trash from Baseline WLA with the note that percent reductions from the Baseline WLA will be assumed whenever full capture systems are installed in corresponding percentages of the conveyance discharging to Machado Lake. As discussed in subsequent city-	Los Angeles Permit Group (Comment 12)	The permit does not utilize any decimal values while expressing the baseline trash generation rates. Per federal regulations (40 CFR §122.44(d)(1)(vii)(B)), effluent limitations must be consistent with the assumptions and requirements of available TMDL WLAs and accordingly has incorporated the baseline generation rates for the Permittees based on the information found in the Final Staff Report page 18. If the Permittees wish to derive site specific trash generation rates based on new information they may do	None

	<p>specific comments, there are errors in the tributary areas originally used in the staff report, but in general, tributary areas are available only to about three significant figures when expressed in square miles. Thus the working draft should not be carrying seven significant figures in expressing the WQBELs as annual discharge rates in uncompressed gallons per year. The convention when multiplying two measured values is that the number of significant figures expressed in the product can be no greater than the minimum number of significant figures in the two underlying values. Thus if the tributary area is known to only three or four significant figures, and the estimated trash generation rate is known to four significant figures, the product can only be expressed to three or four significant figures.</p> <p>Thus there should be no values to the right of the decimal place and the whole numbers should be rounded to the correct number of significant figures.</p>		<p>though the Trash Monitoring and Reporting Plan. See response to Los Angeles Permit Group comment 11.</p>	
<p>Machado Lake Trash TMDL</p>	<p>As previously commented, the tentative order assigns a numerical value for trash generation rate of 5,334 gallons of uncompressed trash per square mile per year. Therefore the LACFCD is to reduce 16.41 gallons of uncompressed trash to zero by 3/6/2016. This is inconsistent with the method used in the Basin Plan Amendment. The LACFCD should not be assigned a trash generation rate since the</p>	<p>Los Angeles County Flood Control District (Comment 78)</p>	<p>The Board disagrees. Page 16 of the Final Staff Report for the Machado Lake Trash TMDL states that "...the Baseline Waste Load Allocation for the responsible jurisdictions is equal to 5334 gallons of uncompressed trash per square mile per year." However, responsible jurisdictions can either choose to use the calculated baseline waste load allocation, or calculate their own and submit it to the Regional Water Board as part of the TMRP approval process. Furthermore, the final TMDL staff report (page 18) identifies the LACFCD as a responsible jurisdiction with a point source area of 0.03</p>	<p>None</p>

	LACFCD property does not generate trash.		mi ² (page 18). Per federal regulations (40 CFR §122.44(d)(1)(vii)(B)), effluent limitations must be consistent with the assumptions and requirements of available TMDL WLAs. Accordingly, the Board has issued LACFCD a baseline trash generation rate of 16.41 gal/year.	
Machado Lake Nutrient TMDL	The Machado Lake Nutrient TMDL provides for a reconsideration of the TMDL 7.5 years from the effective date prior to the final compliance deadline. Please include an additional statement as item C.3.c of Attachment N: "By September 11, 2016 Regional Board will reconsider the TMDL to include results of optional special studies and water quality monitoring data completed by the responsible jurisdictions and revise numeric targets, WLAs, LAs and the implementation schedule as needed."	Los Angeles Permit Group (Comment 13); Peninsula Cities (Comment 41)	It is not necessary to include the dates for scheduled TMDL reconsiderations in the permit, as these reconsiderations occur through the basin plan amendment process as opposed to the permitting process. The order includes a provision that allows the Board to reopen and modify the permit to incorporate provisions as a result of future amendments to the Basin Plan, such as the reconsideration of a TMDL. See Part VI.A.7.a.iv. Further, the tentative order has been revised to include greater specificity regarding this reopener provision.	Yes, Part VI.A.7.a.iv
Machado Lake Pesticides and PCBs TMDL	The TMDL Table 7-38.2, Task 4 on page 13 states that: 1.5 years after effective date of TMDL, submit a LWQMP, MRP Plan and QAPP for approval by the Ex. Officer to comply with a MOA. If there is already a LWQMP and QAPP in place to implement the Machado Lake Nutrient TMDL, these documents may be amended to address the requirements of this TMDL. This TMDL was effective on March 2012. 1.5 year after this date which is September 2013, is when this plan is due. Therefore we request to correct the date of submission of the plan in permit from Sep. 20, 2012 to September 20, 2013 to be consistent with BPA for this TMDL.	City of Los Angeles (Comment 89, 121)	Task 4 in the Machado Lake Pesticides and PCBs TMDL relates to the Load Allocation requirements not the Waste Load Allocation requirements; therefore, the date is correct. Footnote 6 from the TMDL will be included in the MRP on pages E-11 and E-54. The footnote will state: <u>The deadline for Permittees assigned both WLAs and LAs to submit one document to address both WLA and LA monitoring requirements and implementation activities shall be September 20, 2013.</u>	Add footnote to the September 20, 2012, date on pages E-11 and E-54 as specified.

Machado Lake Pesticides and PCBs TMDL	This activity needs to be performed 30 days from date of Executive Officer approval of MRP and QAPP or October 20, 2013. However during that time Machado Lake will be under construction of a massive Proposition O-funded project, the Machado Lake Ecosystem Rehabilitation Project. This project is estimated to be completed on March 2016. As such monitoring can only start after completion of construction. Please consider revising the dates to reflect the schedule of this project or acknowledge that no monitoring is expected to commence.	City of Los Angeles (Comment 122)	The information detailed by the commenter should be included in the MRP and QAPP submitted for approval by the Executive Officer. The Permittees should still report on the activities concerning the water body over the course of the reporting year.	None
Machado Lake Pesticides and PCBs TMDL	As described in the comment above, monitoring cannot be performed during this period (October 20, 2013 to October 20, 2015) due to the construction of the lake. Please revise the proposed schedule to reflect the construction phase of the Machado Lake Ecosystem Rehabilitation Project.	City of Los Angeles (Comment 123)	See response to City of Los Angeles Comment 122.	None
Dominguez Channel Toxics TMDL	Attachment K, Tables K-4, K-5, and K-6, identify the County of Los Angeles and the Los Angeles County Flood Control District (LACFCD) as Permittees subject to the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL. This designation violates the Amended Consent Decree entered on August 24, 1999, by the United States District Court in <i>United States v. Montrose Chemical Corporation, et al.</i> , Case No. CV90-3122-AAH (JRx) (“Amended Consent Decree”).	County of Los Angeles (Comment 222, & 223); LACFCD (Comment 79)	There is no conflict between the Consent Decree (CD) and the inclusion of the TMDL in this permit. The CD and the TMDL do address partially overlapping geographic areas of contaminated sediments, but they rely on different authorities, address different concerns, and are not mutually exclusive. The TMDL was deemed necessary as part of a comprehensive approach to water quality in the Dominguez Channel and the Ports of Los Angeles and Long Beach. The CD does not interfere with the Regional Board’s authority to adopt and implement TMDLs pursuant to Clean Water Act section 303(d), or to revise and enforce the Basin Plan. Further, the CD does not affect the authority of the Regional Board to incorporate those TMDLs as necessary into applicable NPDES permits, which it is required to do	None

	<p>The Amended Consent Decree resolved all liability of the settling local governmental entities for all natural resource damages with respect to the “Montrose NRD Area” and all response costs incurred in connection with the “Montrose NPL Site” (Amended Consent Decree, p. 19). The Montrose NRD Area was defined to include the Los Angeles and Long Beach Harbors (Amended Consent Decree, ¶ 6.J). The Montrose NPL Site was defined to include the Torrance Lateral, the Dominguez Channel from Laguna Dominguez to the Consolidated Slip, and that portion of the Los Angeles Harbor known as the Consolidated Slip (Amended Consent Decree, ¶ 6.I.).</p> <p>The Permit’s imposition of obligations on the County to comply with the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Water Toxic Pollutants TMDL, including the requirement to comply with the concentration-based effluent limitations for pollutant concentrations in the sediment, violates the Amended Consent Decree. Under the Amended Consent Decree, the Regional Water Board has explicitly agreed that it will not require the County and LACFCD to take these and other actions (Amended Consent Decree, ¶¶ 11 and 17).</p>		<p>pursuant to federal regulations. Compliance with TMDLs and related implementation plans and permits does not constitute response action – either removal or remedial – and does not involve “Response Costs,” as the term is defined in the CD.</p> <p>In addition, this MS4 permit is one of the regulatory mechanisms identified in the TMDL to implement the TMDL waste load allocations, to which the County of Los Angeles and the LACFCD are permittees. Furthermore, the County of Los Angeles and LACFCD are responsible for ensuring that storm water and non-storm water discharged from the MS4s for which it is an owner or operator do not cause or contribute to exceedances of water quality standards. Unless dischargers can demonstrate that their discharges did not contribute to the exceedances coming from the outfall, MS4 dischargers are jointly and severally liable for discharges from the common storm drain system. The inter-connected nature of the Los Angeles County MS4 makes it difficult to determine exactly where pollutants originate within the MS4. In such an integrated system, one or more Permittees may have caused or contributed to violations. Thus, Permittees are jointly and severally liable either because a Permittee is one of several sources that discharge pollutants or a Permittee conveys and ultimately discharges pollutants that may have originated further up the MS4.</p> <p>In the CD, the State explicitly reserves rights to bring claims under the Clean Water Act and the Porter-Cologne Water Quality Control Act for, among other matters, violations of NPDES permits.</p>	
<p>Dominguez Channel Toxics TMDL</p>	<p>Attachment K does not adequately clarify responsibility among Permittees for compliance with the very complex TMDL. The State Board requested a</p>	<p>LA Permit Group (Comment 14); Peninsula</p>	<p>The tentative Order was revised to include a new Table K-13 similar to the table referenced in Attachment D of the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL</p>	<p>A new Table K-13 was added to Attachment K.</p>

	<p>clarification of this issue from the Regional Board staff in its review of the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL. Regional Board staff developed and submitted an Attachment D Responsible Parties Table RB4 Jan. 27, 2012, which was provided to the State Board and responsible agencies during the SWRCB review of this TMDL, and is posted on the Regional Board website in the technical documents for this TMDL. This table should be included either in Attachment K or in Attachment N to clarify Permittees responsibilities.</p>	<p>Cities (Comment 42); South Bay Cities; City of Torrance (Comment 85)</p>	<p>memo to State Board, to clarify for which water bodies each Permittee is a responsible agency.</p>	
<p>Dominguez Channel Toxics TMDL</p>	<p>The Dominguez Channel and Greater LA and Long Beach Harbor Waters Toxic Pollutants TMDL provides for a reconsideration of the TMDL targets and WLAs. Please include an additional statement from the TMDL in Attachment N, Part E: "By March 23, 2018, Regional Board will reconsider targets, WLAs and LAs based on new policies, data or special studies. Regional Board will consider requirements for additional implementation or TMDLs for Los Angeles and San Gabriel Rivers and interim targets and allocations for the end of Phase II."</p>	<p>LA Permit Group (Comment 15); Peninsula Cities (Comment 43); South Bay Cities; City of Torrance (Comment 86)</p>	<p>It is not necessary to include the dates for scheduled TMDL reconsiderations in the permit, as these reconsiderations occur through the basin plan amendment process as opposed to the permitting process. The order includes a provision that allows the Board to reopen and modify the permit to incorporate provisions as a result of future amendments to the Basin Plan, such as the reconsideration of a TMDL. See Part VI.A.7.a.iv. Further, the tentative order has been revised to include greater specificity regarding this reopener provision.</p>	<p>Yes, Part VI.A.7.a.iv</p>
<p>Dominguez Channel Toxics TMDL</p>	<p>For the Freshwater portion of the Dominguez Channel in section E.2.a, there are no provisions for BMP implementation to comply with the interim goals. The wording appears to</p>	<p>LA Permit Group (Comment 37 and 38)</p>	<p>The interim water quality-based effluent limitations for the freshwater portion of the Dominguez Channel, which includes the Torrance Lateral, are based on existing conditions. Therefore, Permittees shall comply with the interim effluent limitations as of the effective date of the</p>	<p>None</p>

	<p>contradict Section E.2.d.i.4, which allows Permittees to submit a Watershed Management Plan or otherwise demonstrate that BMPs being implemented will have a reasonable expectation of achieving the interim goals.</p> <p>Similarly, for Greater LA Harbor water bodies the Table establishing Interim Effluent Limitations, Daily Maximum (mg/kg sediment), does not provide for natural variations that will occur from time to time in samples collected from the field. Given the current wording in the proposed Receiving Waters Limitations, even one exceedance could potentially place Permittees in violation regardless of the Permittees level of effort. Reference should be made in this section to Section E.2.d.i.4 which will provide the opportunity for the Permittee to develop BMP-base compliance efforts to meet interim goals.</p>		<p>Order.</p> <p>Likewise, the interim effluent limitation for sediment discharged to the Dominguez Channel Estuary and Harbor waters are based on existing conditions. Therefore, Permittees shall comply with the interim effluent limitations as of the effective date of the Order. Part E.4.a. outlines how Permittees may demonstrate compliance with the interim water quality-based effluent limitations for pollutant concentrations in the sediment.</p>	
<p>Dominguez Channel Toxics TMDL</p>	<p>For the freshwater portion of the Dominguez Channel: the wording should be clarified. Section E.1 states that "Permittees subject to the provisions below are identified in Attachment K, Table K-4." Then the Table in Section E.2.b Table "Interim Effluent Limitations --- Sediment" lists all Permittees except the Fresh water portion of the Dominguez Channel. For clarification purposes, we request adding the phase to the first row: "Dominguez Channel Estuary (below Vermont)"</p>	<p>LA Permit Group (Comment 39)</p>	<p>For clarification, Attachment N, part E.2 was revised as indicated below. The underlined text was added and the strikeout text was deleted.</p> <p>2. Permittees shall comply with the following <u>interim water quality-based effluent limitations for discharges to Dominguez Channel and Torrance Lateral</u> listed below, as of the effective date of this Order.</p> <p><u>a. Permittees shall comply with the following interim water quality-based effluent limitations for discharges to Dominguez Channel freshwater during Wwet Wweather:</u></p> <p><u>i. The freshwater toxicity interim water quality-based effluent limitation is 2 TUC. The</u></p>	<p>The language was changed to part E.2 on pages N-4 and N-5 as specified.</p>

			<p>freshwater interim effluent limitation shall be implemented as a trigger requiring initiation and implementation of the TRE/TIE process as outlined in US EPA's "Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications Under the National Pollutant Discharge Elimination System Program" (2000).</p> <p>ii. Permittees shall comply with the following interim metals water quality-based effluent limitations for discharges to the Dominguez Channel <u>freshwater</u> and Torrance Lateral <u>during wet weather</u>:</p>	
Los Angeles River WMA				
Los Angeles River Trash TMDL	The Trash Effluent Limitations listed were not previously identified. Also they appear to be inconsistent value from the Los Angeles River Trash TMDL's final resolutions and the source of the data is not specified. Please provide effluent limitations to be consistent with the TMDL standards or specify source of data.	City of Los Angeles (Comment 145)	The effluent limitations were calculated by multiplying the baseline waste load allocations as listed in Table 7-2.2 of the Basin Plan by the required percent reductions as listed in Table 7-2.3 of the Basin Plan.	For clarity, the baseline WLAs were added to section A.3.
Los Angeles River and Tributaries Metals TMDL	Wet weather definition is inconsistent with TMDL documents.	City of Los Angeles (Comment 146)	The Board disagrees. The commenter is confusing the TMDLs. Footnote 47 of Attachment O C.2.d. refers to the wet weather definition as described in the Los Angeles River and Tributaries Metals TMDL. The commenter states that the definition should be changed to reflect the definition described in the Los Angeles River Bacteria TMDL, which would be incorrect.	None
Los Angeles River and Tributaries Metals TMDL	Permittees have participated in the Brake Pad Partnership legislation and were successful. Legislation will be in effect 15-20 years from now, which is after the final compliance WLA deadline of January 2028 in the Los Angeles River Metals TMDL. Implementation of this legislation will	City of Vernon (Comment 25)	Compliance schedules based on a TMDL implementation plan cannot exceed the maximum time that the TMDL implementation plan allows. Thus, the permit must be consistent with the deadlines as established in the Los Angeles River and Tributaries Metals TMDL.	None

	<p>provide significant metals removal effectiveness. Because the WLA deadline occurs prior to the Brake Pad regulations taking effect, hundreds of millions of dollars will be required to be spent on treatment controls in order to achieve compliance. Instead, the deadline for compliance should be extended to correspond with the source control initiative ultimately saving taxpayer dollars on programs that may not be necessary.</p>			
<p>Los Angeles River and Tributaries Metals TMDL</p>	<p>Deadlines placed on segments are contradictory with the flow of the river. Segment B/Reach 2 is near the middle to lower end of the River. It is difficult to grapple how it makes any sense to clean the middle of the River when the upper Segments may still be contributing bacteria into the River. Hence, contribution will flow down the River to Segment B and A. The Bacteria TMDL Staff Report dated July 15, 2010 states on page 64, Section 9.4.6, Prioritization of segments; MS4 dry weather implementation,</p> <p>The criteria used to select the order of segments for implementation purposes was flawed. Reaches north of Segment B are much more likely to be used for recreational purposes. The fact that one or two individuals were observed entering the river in Segment B does not compare with the number of individuals entering the river north of Segment B.</p> <p>A reopener of the Los Angeles River</p>	<p>City of Vernon (Comment 32)</p>	<p>The comment is outside the scope of this permit issuance. As noted in the Notice of Opportunity for Public Comment and Notice of Public Hearing dated June 6, 2012, the validity of the TMDLs being incorporated into the permit are not an issue before the Board in this proceeding.</p>	<p>None</p>

	Bacteria TMDL is imperative. We recognize that Permittees should assist in the reduction of bacteria in this concrete-lined channel; however, it makes most sense to treat segments starting from the top and continuing downstream. It does not make sense to expend public resources in cleaning the middle to lower ends of the River when contributions of bacteria are likely from the upper segments.			
Los Angeles River and Tributaries Metals TMDL	Some Permittees have opted out of the grouped effort. This section needs to detail how these mass-based daily limitations will be reapportioned.	Los Angeles Permit Group (Comment 40)	Attachment O section C.2.a., states “The watershed is divided into five jurisdictional groups based on the subwatersheds of the tributaries that drain to each reach of the river. Each jurisdictional group shall achieve compliance in prescribed percentages of its subwatershed(s). Jurisdictional groups can be reorganized or subdivided upon approval by the Regional Water Board Executive Officer.” This section addresses the concerns raised by the commenter.	None
Los Angeles River Watershed Bacteria TMDL	Why are "Receiving Water Limitations" being inserted here? None of the other TMDLs seem to follow that format.	Los Angeles Permit Group (Comment 41)	The permit provisions implementing the bacteria WLAs generally follow this format since the WLAs are expressed in the TMDLs as a receiving water limitation (i.e., number of allowable exceedance days).	None
Los Angeles River Bacteria TMDL	The WLAs in the LA River Bacteria TMDL assigned to the MS4 are expressed as allowable exceedance days. The WLAs are not expressed as concentration based effluent limitations. Discharges from the MS4 could be greater than the proposed effluent limits but concentrations in the wave wash could be lower than the numeric target. Furthermore, the TMDL allows for a certain number of exceedances of the single sample maximum, which may also allow for	City of Los Angeles (Comment 147)	The Regional Water Board established receiving water limitations, which are consistent with the WLA expressed as allowable exceedance days in the Los Angeles River. In addition, the Regional Water Board established concentration-based water quality based effluent limitations based on the bacteria water quality objectives. In the bacteria TMDLs, the numeric targets are based on the multi-part bacteriological water quality objectives; therefore, the Permit is consistent with the assumptions and requirements of the Los Angeles River Bacteria TMDL. The order allows Permittees to demonstrate compliance with <i>both</i> the receiving water limitations and the water quality based effluent	Yes, in Parts VI.E.2.d and VI.E.2.e for clarification.

	<p>exceedances of the proposed effluent limitations without violating the assumptions of the WLAs. As such, the assignment of effluent limitations as concentration based limitations is not consistent with the requirements or assumptions of the WLAs and should be removed. Only receiving water limitations are appropriate given that both the TMDL target and the WLAs are expressed in the receiving waters. Additionally, this approach unnecessarily places MS4 Permittees in a position to receive mandatory minimum penalties for the exceedance of effluent limits that are not consistent with assumptions of the WLAs.</p>		<p>limitations in several ways, pursuant to Parts VI.E.2.d and VI.E.2.e.</p>	
Los Angeles River Bacteria TMDL	<p>The load-based allocations are grouped, but can be separated by jurisdiction based on drainage area, per the BPA. Footnote 48 should be revised to state that the load-based interim WQBELs can be separated into individual jurisdictions based on proportional drainage area</p>	City of Los Angeles (Comment 148)	<p>The language in Footnote 48 is consistent with the Los Angeles River Bacteria TMDL. The TMDL states, “However, WLA may be distributed based on proportional drainage area, upon approval of the Executive Officer.” Footnote 48 states, “However, the interim dry weather water quality-based effluent limitations may be distributed based on proportional drainage area, upon approval of the Regional Water Board Executive Officer.”</p>	None
Los Angeles River Bacteria TMDL	<p>The TMDL BPA states that MS4 dischargers can demonstrate compliance with the final dry weather WLAs by demonstrating that the final WLA are met instream or by demonstrating one of the following conditions at outfalls to the receiving waters:</p> <p>Demonstration of compliance as specified in the MS4 NPDES permit which may include the use of BMPs where the permit’s administrative</p>	City of Los Angeles (Comment 149)	<p>The third option is a reference to the determination of compliance as specified in the MS4 NPDES Permit. At this time, the Board does not have sufficient information and data needed to perform the quantitative analysis that would support the expectation that BMPs would meet the water quality-based effluent limitations. The Board has indicated in the Fact Sheet that it will evaluate the effectiveness of an action based compliance determination approach in achieving interim effluent limitations for storm water during this permit term. If an action based compliance approach is effective in achieving compliance with interim effluent limitations</p>	Yes, Part VI.A.7.a, new subpart ix.

	<p>record supports that the BMPs are expected to be sufficient to implement the WLA in the TMDL, the use of calculated loading rates such that loading of <i>E. coli</i> to the segment is less than or equal to a calculated loading rates that would not cause or contribute to exceedances based on a loading capacity representative of conditions in the River at the time of compliance or other appropriate method.</p> <p>This method, which provides both BMP based and load based methods for demonstrating compliance is not provided in the permit. The permit must be consistent with the WLAs as outlined in the BPA.</p>		<p>for storm water during this permit term, the tentative order has been revised to include an additional cause for modification in Part VI.A.7.a. that would allow modifications to Part VI.E. and Attachments L-R to allow an action-based, BMP compliance demonstration approach with regard to final WQBELs for storm water discharges based on the Regional Board's review of relevant research on storm water quality and the efficacy of storm water control technologies. With regard to non-storm water discharges, the order allows a Permittee to demonstrate, for compliance determination purposes, that there are no non-storm water discharges to the receiving water. To the extent that low flow diversions are employed by Permittees, these actions could be documented to support a Permittee's demonstration of no discharge to the receiving water.</p>	
Echo Park Lake Nutrient TMDL and Echo Park Lake PCBs and Pesticide TMDL	<p>Table C requires that the annual reporting start on December 15, 2012, and annually thereafter and that compliance monitoring start on December 15, 2013, and annually thereafter. Please note that no monitoring results will be submitted by December 2012 nor by December 2013, because Echo Park Lake is under construction for the Proposition O-funded Echo Park Lake Rehabilitation Project through the end of 2013. The first year of water quality data will be submitted by December 15, 2014.</p>	<p>City of Los Angeles (Comment 124 and 125)</p>	<p>See response to City of Los Angeles comment 122.</p>	<p>None</p>
Echo Park Lake Nutrient TMDL	<p>Mass based allocations Table for nutrients is inconsistent with the TMDL document.</p>	<p>City of Los Angeles (Comment 150)</p>	<p>The Board disagrees that the requested additions need to be made. The TMDL provisions illustrate the correct requirements associated with the mass-based allocations. The provisions state that the allocations are "Measured at the point of discharge using a three-year average. The</p>	<p>None</p>

			mass-based allocations are equivalent to existing concentrations of 0.12 mg/L total phosphorus as a summer average (May-September) and annual average, and 1.2 mg/L total nitrogen as a summer average (May-September) and annual average based on approved flow conditions.” The fact that the allocations are equivalent to the summer average and annual average implies that they include discharges year round during both wet and dry weather. Furthermore, it specifically states that allocations are measured as a three-year average, and section F.2.e, reflects the other information requested by the commenter.	
Echo Park Lake PCBs TMDL	Waste load allocation table for PCBs is inconsistent with the TMDL document.	City of Los Angeles (Comment 151)	The Board disagrees the requested additions need to be made. The TMDL provisions below the table state that the allocations are “Measured at the point of discharge. Applied as an annual average.” This statement addresses both additions requested to be made by the commenter. The annual average implies that the allocations are an average over the course of the year which would incorporate both wet and dry weather.	None
Echo Park Lake PCBs TMDL	Alternative waste load allocation table for PCBs is inconsistent with the TMDL document.	City of Los Angeles (Comment 152)	See response to City of Los Angeles comment 151 above. Similarly, the alternative allocations expressed as a three year average also imply an annual average over a three year period during both wet and dry weather.	None
Echo Park Lake Chlordane TMDL	Waste load allocation table for Chlordane is inconsistent with the TMDL document.	City of Los Angeles (Comment 153)	See response to City of Los Angeles comment 151 above.	None
Echo Park Lake Chlordane TMDL	Alternative waste load allocation table for Chlordane is inconsistent with the TMDL document.	City of Los Angeles (Comment 154)	See response to City of Los Angeles comment 152. The three-year average is incorporated into the permit to coordinate with the fish tissue targets required to be met to utilize the alternative allocations.	None
Echo Park Lake Dieldrin TMDL	Waste load allocation table for Dieldrin is inconsistent with the TMDL document.	City of Los Angeles (Comment 155)	See response to City of Los Angeles comment 151.	None
Echo Park	Alternative waste load allocation table	City of Los	See response to City of Los Angeles comments 152 and	None

Lake Dieldrin TMDL	for Dieldrin is inconsistent with the TMDL document.	Angeles (Comment 156)	154.	
TMDL Monitoring Plans Los Angeles River – Table E-1	Table E-1 indicates that the monitoring plan was not submitted for the LA River Nutrients TMDL. The County of Los Angeles, in cooperation with the City of Los Angeles, submitted the monitoring work plan on March 23, 2005, which to the best of our knowledge was not approved by the Regional Water Board.	County of Los Angeles (Comment 142); City of Los Angeles (Comment 90); City of Vernon (Comment 31)	A monitoring plan was submitted by the POTWs identified by the LA River Nutrients TMDL on March 23, 2005. However, a workplan was never submitted by the MS4 Permittees.	None
<i>San Gabriel River WMA</i>				
San Gabriel River Metals TMDL	Permittees under the new MS4 permit (those in LA County) need to be able to separate themselves from Orange County cities. Since the 0.941 kg/day is a total mass limit, it needs to be apportioned between the two counties. Also, the MS4 permit needs to contain language allowing Permittees to convert group-based limitations to individual Permittee based limitations.	LA Permit Group (Comment 22)	Pursuant to the provisions in Part VI.E.3 of the order, Permittees may include as part of their Watershed Management Program, a proposal to distribute the WLAs among the Permittees based on their proportional drainage area.	None
San Gabriel River Metals TMDL	It is the Permittees understanding that the lead impairment of Reach 2 of the San Gabriel River has been removed. It should be removed from the MS4 permit.	Los Angeles Permit Group (Comment 42)	That is incorrect. The U.S. EPA established San Gabriel River Metals TMDL clearly indicates that Reach 2 of the San Gabriel River is impaired due to exceeded levels of lead and consequently developed wet weather and dry weather Waste Load Allocations to address the impairment. The 2010 USEPA approved California Section 303(d) List includes this listing in Category 5 as being addressed by a TMDL.	None.
Reporting Deadlines for San Gabriel River Metals, Puddingstone Reservoir Nutrient,	The RWQCB is requesting annual reporting of monitoring results to begin on Dec. 15, 2012. This would only be 4 months after the adoption of the Permit and before the monitoring plan is even required to be submitted to the RWQCB.	County of Los Angeles (Comment 180)	The first annual report of monitoring results under the new order will be revised to December 2013.	The changes will be made to pages E-64 thru E-68 of Attachment E.

<p>Puddingstone Reservoir Mercury, and Puddingstone Reservoir PCBs and OC Pesticides TMDLs</p>				
<p>Submission Deadlines for San Gabriel River Metals and Los Cerritos Channel Metals Implementation Plans</p>	<p>If an IMP or CIMP is due to the RWQCB 9 to 12 months after adoption of the Permit and the Watershed Management Program is due to the RWQCB 1 year after adoption of the Permit, it is infeasible to assume an implementation plan can be developed and delivered to the RWQCB prior to the submittal of the IMP or CIMP and implementing the monitoring program.</p>	<p>County of Los Angeles (Comment 181)</p>	<p>The San Gabriel River Metals TMDL was established by the USEPA in 2007. Permittees have had ample time to identify implementation strategies that could be included in a Watershed Management Program plan for the San Gabriel River WMA; therefore, six months is a reasonable amount of time to develop a WMP plan for the San Gabriel River Metals and Selenium TMDL. The Los Cerritos Channel Metals TMDL was established by the U.S. EPA more recently -- in 2010; therefore, the tentative order allows one year to develop a WMP plan. Additionally, in both cases, these TMDLs are the only watershed-wide TMDLs established for each of these watershed management areas; therefore, there is no significant conflict between these schedules and the development of WMPs for Regional Water Board adopted TMDLs. Where possible, the Regional Board encourages Permittees to submit their IMP or CIMP simultaneously with their Watershed Management Program; however, this in no way extends the deadline of one to align with the other unless so stated in the Order.</p>	<p>None</p>
<p>Legg Lake Trash TMRP Reports & TMRP Reports MFAC</p>	<p>As written, the Permit requires reporting of Permittees compliance with the installation of full capture systems. Per the RWQCB approved TMRP full capture devices or a MFAC program were not required for the responsible parties to be in compliance with the TMDL.</p>	<p>County of Los Angeles (Comment 182)</p>	<p>The approved Legg Lake Trash TMDL TMRP utilizes the MFAC compliance strategy and requires annual reporting. Consequently, the reporting requirements for full capture systems for Legg Lake will be deleted.</p>	<p>Deleted reporting requirements associated with Full Capture Systems in Legg Lake. Attachment E page E-65.</p>

<p>San Gabriel River Metals and Impaired Tributaries Metals and Selenium TMDL</p>	<p>As previously commented, it is unclear where the values in the table under Section E.1.b for wet weather water quality based effluent limitations come from. They do not match the approved TMDL in units or values.</p>	<p>County of Los Angeles (Comment 227)</p>	<p>The values expressed in Attachment P Section A.2, are consistent with the U.S. EPA established TMDL. Page 38 of the Total Maximum Daily Loads for Metals and Selenium in San Gabriel River and Impaired Tributaries details that the overall wet weather allocations are broken down by percent land area. The Board multiplied the overall wet weather loading capacity by the percent area calculated by USEPA. This gave the values expressed in the permit. The µg/l units will be inserted for clarity.</p>	<p>Insert the unit µg/l to the table in Attachment P Section A.2.</p>
<p>Los Cerritos Channel and Alamitos Bay WMA</p>				
<p>Colorado Lagoon Annual Monitoring Reports</p>	<p>Providing a date for when the monitoring plan is due is infeasible since there is no way to tell when CLTMP will be approved by the RWQCB.</p>	<p>County of Los Angeles (Comment 183)</p>	<p>The CLTMP was conditionally approved on August 23, 2012, and specified that monitoring shall begin as soon as possible but no later than February 1, 2013.</p>	<p>The due date will be changed to February 1, 2013.</p>
<p>Middle Santa Ana River WMA</p>				
<p>Middle Santa Ana River Watershed Bacteria Indicator TMDL</p>	<p>To focus TMDL implementation efforts the Middle Santa Ana River (MSAR) Watershed TMDL Task Force was established, and it is administered by Santa Ana Watershed Project Authority (SAWPA). The City of Pomona joined the MSAR Task Force and meets regularly to coordinate water quality management activities, and discuss in a forum the most cost effective and efficient strategy to address the Bacterial Indicator TMDL Mandate. City staff also attends the Comprehensive Bacteria Reduction Plan (CBRP) working group on identifying if urban runoff is the source of pollutant.</p> <p>The City of Pomona would request from the Regional Water Board to acknowledge the City's efforts and</p>	<p>City of Pomona</p>	<p>The CBRP and reporting requirements developed by San Bernardino County are specific to and apply only to the Cities within San Bernardino County. Therefore, the City of Pomona cannot be covered by the San Bernardino County CBRP.</p> <p>The Board, however, acknowledges that Pomona and Claremont have been working with the Middle Santa Ana River Watershed TMDL Task Force. A new provision has been added to the Tentative Order at Part VI.C. Watershed Management Programs section VI.C.4.f. to allow the Cities of Pomona and Claremont to develop a CBRP, as follows:</p> <p><u>f. Permittees subject to the Middle Santa Ana River Watershed Bacteria Indicator TMDL shall submit a Comprehensive Bacteria Reduction Plan (CBRP) for dry weather to the Regional Water Board Executive Officer no later than six months after the effective date of this Order. The CBRP shall describe, in detail, the specific actions that have</u></p>	<p>New language was added as indicated.</p>

	<p>support the continuation of working collaboratively with the MSAR Task Force and the San Bernardino County Stormwater Program’s CBRP Working Group to achieve compliance with the MSAR Watershed Bacteria Indicator TMDL. The San Bernardino County Stormwater Program has developed a CBRP, and the City requests to use their CBRP and reporting requirements to be in compliance with the MSAR TMDL.</p>		<p><u>been taken or will be taken to achieve compliance with the dry weather water quality-based effluent limitations and the receiving water limitations for the Middle Santa Ana River Watershed Bacteria Indicator TMDL by December 31, 2015. The CBRP shall also establish a schedule for developing a CBRP to comply with the water quality-based effluent limitations and the receiving water limitations for the Middle Santa Ana River Bacteria TMDL during wet weather by December 31, 2025. The CBRP may be developed in lieu of the Watershed Management Program for the Middle Santa Ana River Watershed.</u></p>	
<p>Middle Santa Ana River Watershed Bacteria Indicator TMDL</p>	<p>Claremont is not subject to nor located within the jurisdiction of the Santa Ana Regional Board; therefore, TMDL has no application to Claremont. The Los Angeles Regional Board cannot include a TMDL adopted by another jurisdiction for implementation through the MS4 permit unless the Board includes into its Basin Plan as an amendment. Therefore, the Regional Board should eliminate the requirement.</p>	<p>LA Permit Group (Comment 21); Cities of: Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, San Gabriel West Covina, and Claremont</p>	<p>The Board disagrees. Although the Cities of Claremont and Pomona are not located within the jurisdictional boundaries of the Santa Ana Regional Board, the Santa Ana Regional Board may regulate any discharges that could affect the quality of the waters within its region. (Cal. Wat. Code, § 13260(a)(1).) The Middle Santa Ana River Watershed Management Area (MSAR WMA) covers approximately 488 square miles and lies mostly in San Bernardino and Riverside Counties; however, a small part of Los Angeles County is also included. The area of Los Angeles County that is located in the MSAR WMA includes portions of the Cities of Pomona and Claremont. Surface drainage from these portions of Pomona and Claremont is generally southward toward Chino Creek and San Antonio Creek, which is tributary to Chino Creek. Thus, the Cities discharges could affect the quality of the waters within the boundaries of both the Los Angeles Regional Board and the Santa Ana Regional Board.</p> <p>Chino Creek is listed on the 2010 CWA Section 303(d) List for bacteria. The Santa Ana Regional Board adopted TMDLs for bacteria for the Middle Santa Ana River Watershed, which includes Chino Creek. Pomona and Claremont are appropriately named as responsible parties in the TMDL. The Middle Santa Ana River</p>	<p>New language added to Attachment R</p>

		<p>Bacteria Indicator TMDL was approved by the State Water Board, OAL and USEPA. Prior to becoming effective, the Cities had ample opportunities to make comments and/or otherwise challenge their inclusion in the TMDL. The Cities could have also challenged their inclusion in court, but the Cities chose not to do so. The Santa Ana Regional Board concluded, based upon data and information collected in 1993, 1996-1998 and in 2002-2004, that MS4 discharges is a significant source of bacterial indicators year round to the Middle Santa Ana River, including Chino Creek. Therefore, storm water and non-storm water discharges from Pomona's and Claremont's MS4 may cause or contribute to an exceedance of water quality standards. The Middle Santa Ana River Watershed Bacteria Indicator TMDL is thus applicable to Claremont and Pomona, insofar as these Cities discharge storm water and non-storm water to receiving waters in the Middle Santa Ana River Watershed that are located within the jurisdiction of the Santa Ana Regional Board.</p> <p>Contrary to the assertion of the commenters, the Los Angeles Regional Board is required to incorporate the requirements of the Middle Santa Ana River bacteria TMDL into the permit. Pursuant to 40 CFR section 122.44(d)(1)(vii)(B), the permitting authority shall ensure that effluent limits developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, are consistent with the assumptions and requirements of <i>any available</i> waste load allocation for the discharge <i>prepared by the State and approved by USEPA</i> pursuant to 40 CFR section 130.7 (emphasis added). The regulation does not limit those effluent limitations that must be included in NPDES permits to limitations implemented by the Regional Board issuing the NPDES permit. Therefore, the permit must incorporate all applicable TMDLs, including the Middle Santa Ana River bacteria TMDL. Because the Middle Santa Ana River Watershed Bacteria Indicator TMDL</p>	
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			<p>sets waste load allocations for discharges to the Middle Santa Ana River Watershed, and Claremont and Pomona discharge to receiving waters located in that watershed, the TMDL appropriately names the cities as responsible parties and this permit includes the wasteload allocations consistent with that TMDL.</p> <p>Notwithstanding the above, for matters that are subject to regulation by more than one regional board, Water Code section 13228 provides a process whereby one regional board may designate another regional board to regulate certain discharges. Such a designation is conditioned on the affected person or entity submitting a written request to all affected regional boards, and all affected regional boards agreeing in writing to the designation. Since the draft tentative order was released in June 2012, Los Angeles Board staff has had discussions with representatives of Claremont, Pomona and the Santa Ana Regional Board. Based on those discussions, the Cities of Claremont and Pomona have each submitted written requests to the Los Angeles and Santa Ana Regional Boards requesting that the Santa Ana Regional Board be designated to regulate Claremont and Pomona’s MS4 discharges for compliance with the Middle Santa Ana River bacteria TMDL. The Los Angeles Regional Board and the Santa Ana Regional Board are still in the process of evaluating these requests. The Los Angeles Regional Board, however, added new language to Attachment R of the permit that would take effect if such a designation is made and if the Santa Ana Regional Board issues an NPDES permit applicable to the Cities’ MS4 discharges to the Middle Santa Ana River Watershed.</p>	
<p>Middle Santa Ana River Watershed Bacteria Indicator TMDL</p>	<p>The Regional Board should delete the final fecal coliform effluent limitations and receiving water limitations for both dry and wet weather. The Board’s Basin Plan no longer uses fecal coliform as a fresh water Rec-1</p>	<p>City of Claremont</p>	<p>The Santa Ana Regional Board is in the process of replacing the REC-1 fecal coliform objective with an REC-1 <i>E. coli</i> objective; however, until the new REC-1 <i>E. coli</i> objective is in effect, the Middle Santa Ana River Bacteria TMDL has WLAs based on both fecal coliform and <i>E coli</i>. The Los Angeles Regional Board has</p>	<p>None</p>

	objective. Therefore, the Board cannot include such an objective in the MS4 Permit. The Santa Ana Board is in the process of replacing the Rec-1 fecal coliform objective with an <i>E. coli</i> objective.		addressed this issue the same way the Santa Ana Regional Board addressed this issue with footnotes. Footnotes 65 and 66 in Attachment R state that the fecal coliform limitations become ineffective upon their replacement with <i>E. coli</i> based REC-1 objectives.	
Middle Santa Ana River Watershed Bacteria Indicator TMDL	Claremont would like the TMDL provisions to better reflect how Claremont's compliance will be measured. Claremont does not discharge stormwater or dry weather flows directly to the Chino Basin, including the San Antonio Channel. Claremont's contribution to flow occurs, if at all, only at the limited points where Claremont's MS4 connects with the City of Pomona's MS4. In Claremont's view, it would be in compliance with the effluent limitation if either: (1) compliance existed at the outfall of any MS4 to which Claremont contributes; or (2) compliance existed at the point at which Claremont's MS4 connects to the City of Pomona's MS4. If either of these conditions existed, compliance would be obtained.	City of Claremont	The Board agrees with the compliance determination as stated by the commenter. The provisions that specify compliance determination are listed in the Order at part VI.E.2.e.	None
Middle Santa Ana River Watershed Bacteria Indicator TMDL	The TMDL provisions are inconsistent with the assumptions and requirements of the TMDL. The provisions selectively apply only the numeric portion of the TMDL and ignore the Santa Ana Board's express intent to allow dischargers to comply with the TMDL's WLA through the submission and implementation of Comprehensive Bacterial Reduction Plans (CBRP). Claremont should be allowed to use	City of Claremont	The Board disagrees. The provisions are consistent with the assumptions and requirements of the TMDL. There is insufficient data and information available at this time on the prospective implementation of BMPs throughout the watersheds in Los Angeles County to provide the Regional Water Board reasonable assurance that the BMPs would be sufficient to achieve the numeric WQBELs. In addition, the CBRP and reporting requirements developed by San Bernardino County are specific to and	New language was added as indicated in response to Pomona's comment above; a new provision was added to the list of causes for modification of

	<p>CBRPs. This is the approach outlined by the Santa Ana Board in the TMDL and it is the only approach that is consistent with the assumptions and requirements of the TMDL. Attachment R of the draft permit must therefore be rewritten as proposed in the comment letter.</p>		<p>apply only to the Cities within San Bernardino County. Therefore, the City of Claremont cannot be covered by the San Bernardino County CBRP. However, as indicated in response to the City of Pomona’s comment above, the Board acknowledges that Pomona and Claremont have been working with the Middle Santa Ana River Watershed TMDL Task Force. Accordingly, a new provision has been added to the Tentative Order at Part VI.C. Watershed Management Programs section VI.C.4.f. to allow the Cities of Pomona and Claremont to develop a CBRP for approval by the Executive Officer.</p> <p>If an action based compliance approach through implementation of a CBRP is effective in achieving compliance with interim effluent limitations for storm water, the tentative order has been revised to include an additional cause for modification in Part VI.A.7.a. that would allow modifications to Part VI.E. and Attachments L-R to allow an action-based, BMP compliance demonstration approach with regard to final WQBELs for storm water discharges based on the Regional Board’s review of relevant research on storm water quality and the efficacy of storm water control technologies.</p>	<p>the permit in Part VI.7.a (i.e., subpart ix).</p>
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California Regional Water Quality Control Board, Los Angeles Region
Los Angeles County MS4 Permit
Response to Comments on the Tentative Order
GENERAL AND MISCELLANEOUS MATRIX

Section/Topic	Comment Summary	Commenter(s)	Response	Change Made
<i>Public Participation and Permit Development Process</i>				
Public review and comment period	The 45-day review and comment period on the draft tentative permit has been unreasonably short and/or inadequate given the breadth of the permit, and has denied permittees due process rights under state and federal law.	Cities of Agoura Hills, Artesia, Beverly Hills, Bradbury, El Segundo, Hidden Hills, La Mirada, Malibu, Monrovia, Norwalk, Rancho Palos Verdes, San Marino, South El Monte, West Hollywood, and Westlake Village; Peninsula Cities; LACFCD; County of Los Angeles	This comment was addressed in the Chair's "Order on Objections and Requests Concerning Hearing Procedures and Process" dated September 26, 2012. The Regional Board also provided written responses to multiple Permittees' time extension requests on July 13, 2012 and July 26, 2012.	None
Public review and comment period	The 45-day review and comment period does not satisfy the Clean Water Act standard that requires a reasonable and meaningful opportunity for stakeholder participation.	Cities of Agoura Hills, Artesia, Beverly Hills, Hidden Hills, La Mirada, Monrovia, Norwalk, Rancho Palos Verdes, San Marino, South El Monte, and Westlake Village	The Board has provided a reasonable and meaningful opportunity for stakeholder participation in compliance with the Clean Water Act. Federal regulations implementing the Clean Water Act only require that the Board provide at least 30 days for public comment. Stakeholders were thus provided with more time than federal law requires. Moreover, the Board has made extraordinary efforts to provide opportunities for stakeholder participation during the permit development process. The permit development process began in May 2011. Since that time, the Board has provided countless opportunities for stakeholders to raise concerns, ask questions, and engage in dialogue with Board staff regarding permit	None

			provisions. The Board has held five staff-level workshops and three Board workshops. Board staff has also regularly met with several permittees, either individually or jointly. Board staff also recognized the value of providing permittees and other stakeholders with working proposals of the permit prior to issuing the tentative. Board staff released working proposals for the five principal sections of the permit in March 2012 and April 2012, and allowed for informal written and oral comments. As a result, the draft tentative permit was revised to address many of the concerns raised by permittees and stakeholders during meetings, as well as the written and oral comments received on the working proposals. The tentative permit that was released for a 45-day public comment period reflected those changes.	
Request for Extension of Time in Which to Submit Comments and to Continue the Hearing	The Cities request an extension of 180 working days to include a Revised Tentative Permit to be released with a 45-day comment period. LACFCD and the County of Los Angeles request an extension of at least 6-7 months that would include an extension of the current public comment period and a second draft with an extended public comment period. The extension request would also resolve a conflict city management and officials have with the current September 6-7, 2012 hearing date, which overlaps with the annual League of Cities conference in San Diego.	Cities of Agoura Hills, Artesia, Beverly Hills, Bradbury, Hidden Hills, La Mirada, La Verne, Monrovia, Norwalk, Rancho Palos Verdes, San Marino, South El Monte, West Hollywood, and Westlake Village; LACFCD; County of Los Angeles	The commenters' proposed schedules would delay the issuance of a new MS4 permit by at least six months. Reissuance of the permit is already 6 years overdue. The additional delay is not justified in light of the numerous opportunities for comment that have already been made available to stakeholders since May 2011. As indicated in a memorandum from the Executive Officer to permittees and interested persons on August 7, 2012, the date of the public hearing to consider the tentative permit was changed from September 6-7, 2012 to October 4-5, 2012 that resolved the scheduling conflict with the Annual League of Cities Conference and Expo.	None
Revised copy of tentative	Before the LARWQCB adopts this order, the City of Vernon requests a revised copy of the Tentative Order with an	City of Vernon	The Regional Board has structured its hearing on this permit as a two part hearing. On October 4-5, 2012, the Board held a hearing on the tentative permit circulated on June 6, 2012. On October 18, 2012, a revised	None

	<p>opportunity to comment after it has been revised.</p>		<p>tentative permit was circulated, which included revisions made to the tentative permit since June 6, 2012. The revisions reflected in the revised tentative permit were the result of written and oral comments received by the Board, including oral comments made during the public hearing held on October 4-5, 2012. The City will have an opportunity to provide oral comments on the revisions in the revised tentative permit at the November 8, 2012 hearing.</p>	
<p>Public Participation</p>	<p>Most of these workshops have had the Regional Board staff present the main topics/programs to the Regional Board members, and have then opened up the floor for public comments for three minutes each. In short, the Regional Board members have asked questions of their staff and responses were given without much, if any consideration of the public's concerns. The process is frustrating for permittees in that our issues and concerns are not being adequately heard or addressed. The permittees represent their constituents when appearing before the Board, and we are concerned that various pressing concerns with this permit have yet to be heard.</p>	<p>City of Burbank</p>	<p>The permittees' concerns have been heard and have been considered by the Board. The Board has made extraordinary efforts to provide opportunities for stakeholder participation during the permit development process. The permit development process began in May 2011. Since that time, the Board has provided countless opportunities for stakeholders to raise concerns, ask questions, and engage in dialogue with Board staff regarding permit provisions. The Board has also held five staff-level workshops and three Board workshops. While the workshops were topical in format, permittees and stakeholders were provided time to present their concerns. During the workshops, permittees and stakeholders were often provided more than 3 minutes to present their issues/concerns to the Board and/or Board staff. Some permittees that requested extra time were provided time allotments of 10 minutes or more to present their concerns and the LA Permit Group was provided 30 minutes or more to express joint issues/concerns. During staff-level workshops permittees were not constrained to a specific amount of time to present their concerns. Board staff has also regularly met with several permittees, either individually or jointly, over the last 18 months, affording permittees countless hours to discuss their concerns with staff in detail.</p> <p>Permittee and stakeholder input was considered in the drafting of the tentative permit. Board staff recognized the value of providing permittees and other stakeholders</p>	<p>None</p>

			with working proposals of the permit prior to issuing the tentative. Board staff released working proposals for the five principal sections of the permit in March 2012 and April 2012, and allowed for informal written and oral comments. As a result, the draft tentative permit was revised to address many of the concerns raised by permittees and stakeholders during meetings, as well as the written and oral comments received on the working proposals. The tentative permit that was released for a 45-day public comment period reflected those changes based on a consideration of the permittees' concerns.	
Request for Extension of Time in Which to Submit Comments and to Continue the Hearing	The Board should not conduct a hearing on a new permit while a case that could directly impact the scope of the new Permit, <i>LACFCD v. NRDC</i> , is pending before the U.S. Supreme Court. The Board should not adopt a new permit while there is uncertainty over it. There is no pending need for the Board to act precipitously prior to the Supreme Court's hearing which is only 90 to 120 days from the currently scheduled date for the consideration of the Permit.	LACFCD; County of Los Angeles	<p>The pending case before the U.S. Supreme Court concerns citizen enforcement of certain provisions of the current 2001 permit. As such, the Board does not anticipate that the Court's decision will impact the Board's regulatory authority or the scope of a new permit. In the event that the decision in that case would require changes in the permit, Part VI.A.7.a.vi. of the tentative permit allows the Board to reopen the permit to make necessary changes in response to judicial decisions that become effective after adoption of the permit.</p> <p>Further, while the Court has scheduled oral arguments on December 4, 2012, it is uncertain when the Court will issue a decision. It is likely that the Court would not issue a decision until several months after oral arguments. In addition, it is possible that the Court's decision may remand the case to a lower court. Thus, it could be several months, perhaps even years, before the case is fully resolved.</p>	None
Permit Adoption	Given the continuing threat to public health and the environment posed by stormwater pollution in Los Angeles County, and consistent with the Board's repeatedly stated intent, the Board should	Environmental Groups	The Board agrees that additional delay is not justified in light of the numerous opportunities for comment that have already been made available to stakeholders since May 2011. However, as indicated in a memorandum from the Executive Officer to permittees and interested persons on August 7, 2012, the date of the public hearing to consider the tentative permit was changed	None

	avoid any further delay in the permit adoption process and ensure that a new MS4 permit is finalized in September.		from September 6-7, 2012 to October 4-5, 2012 that resolved a scheduling conflict for several permittee representatives with the Annual League of Cities Conference and Expo.	
Delay in Compliance	We strongly oppose further delay. Extensions on compliance will only signal dischargers that their unwillingness to comply will be rewarded by more extensions.	Surfrider Foundation	The Board agrees that additional delay is not justified in light of the numerous opportunities for comment that have already been made available to stakeholders since May 2011. This permit will establish enforceable provisions, with compliance schedules as appropriate, to protect water quality as required by the Clean Water Act.	None
Alternative Approach to Compliance	The current Draft Permit looks to old methods of pollutant control and is based upon a punitive, not incentive, mentality. LACFCD believes that a regional approach should be incorporated into the MS4. The next Draft Permit should include an alternative requirement in the RWL section that would set forth a procedure for permittees to develop and implement a stormwater infiltration and reuse program as a path to compliance. Once implementation of the program is complete, the permittee will be deemed in full compliance with the RWL section requirements. Thus, LACFCD sees the potential for a two-track road to compliance with water quality standards. Permittees who choose to continue to follow the current iterative process may do so with the additional requirements set by	County of Los Angeles	<p>The Board disagrees that the tentative order looks to old methods of pollutant control. The tentative order provides Permittees the opportunity to develop and implement Watershed Management Programs and, where a Permittee elects to do so, allows customization of requirements and prioritization of implementation of watershed control measures based on the water quality issues specific to a watershed management area. This shift to a more flexible, tailored approach to permit implementation is innovative and encourages Permittees to work collaboratively to find the most cost effective solutions by tailoring storm water management programs to address specific water quality issues.</p> <p>However, the Regional Board also recognizes and supports storm water capture and infiltration to achieve not only the requirements of the tentative order but other benefits including water supply, flood control and other environmental benefits. Therefore, the tentative order has been revised to provide Permittees with the option to develop an enhanced Watershed Management Program. An enhanced Watershed Management Program is one that comprehensively evaluates opportunities, with the participating Permittees' collective jurisdictional area in a Watershed Management Area, for collaboration among Permittees and other partners on multi-benefit regional projects to</p>	Part VI.C. revised.

	<p>TMDLs. But Permittees who believe that a more effective method exists to reduce massive amounts of pollutant loads by simply reducing the amount of runoff will be encouraged to implement stormwater reuse projects. However, permittees and Board staff need time to work together to determine how such a program may exist within the framework of the currently proposed MS4 Permit.</p>		<p>control MS4 discharges of storm water by, wherever feasible, retaining the 85th percentile, 24-hour storm event for the drainage areas tributary to the projects, while also achieving other benefits including flood control and water supply, among others. Where retention of the 85th percentile, 24-hour storm event is not feasible, the enhanced Watershed Management Program shall include a Reasonable Assurance Analysis to demonstrate that applicable water quality based effluent limitations and receiving water limitations shall be achieved through implementation of other watershed control measures. Permittees who elect to participate in such a program will be provided with a longer time period to develop an enhanced Watershed Management Program in recognition of the time necessary to establish partnerships, provide opportunities for meaningful stakeholder involvement and plan regional, multi-benefit projects.</p> <p>The tentative order has been revised to establish that a Permittee’s full compliance with all requirements and dates for their achievement in an approved Watershed Management Program or enhanced Watershed Management Program will constitute compliance with the receiving water limitations in Part V.A. addressed by the program.</p>	
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Facility Information

<p>Title of the Permit</p>	<p>The title of the permit is not accurate. The Permit covers several MS4 systems and there are discharges within the LACFCD’s jurisdiction that are not covered by this Permit. To be accurate, the title should be “Waste Discharge Requirements for 84 Incorporated Cities Within the County of Los Angeles, the County of Los</p>	<p>LACFCD</p>	<p>The title has been revised to “Waste Discharge Requirements for MS4 Discharges within the Coastal Watersheds of the County of Los Angeles, Except Those Discharges Originating from the City of Long Beach MS4.”</p>	<p>Title revised.</p>
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	<p>Angeles, and the Los Angeles County Flood Control District.”</p>			
<p>References to the “LA County MS4”</p>	<p>References to the “L.A. County MS4” or “Los Angeles County MS4” are confusing and inaccurate because the County itself is a Permittee. The reference could be taken as referring to the County’s MS4, as opposed to all of the Permittees’ MS4’s. This also unfairly suggests that the County has principal responsibility for this MS4. The reference also assumes the existence of a single MS4 instead of a collection of separate MS4s which may or may not be interconnected. The County requests that all references (inc. findings and fact sheet) be replaced in the more accurate reference of “MS4s subject to this Order.” The County requests that all references to the “L.A. County MS4 Permit” or “Los Angeles County MS4 Permit” be replaced with a reference to the “permit for the MS4s” or “MS4s subject to this Order.”</p>	<p>County of Los Angeles</p>	<p>Short-hand references such as “L.A. County MS4” or “Los Angeles County MS4” are merely used for ease of reference and do not suggest that the County has principal responsibility for the MS4s subject to the Order. By definition, a “municipal separate storm sewer” includes “a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) . . .” (40 CFR § 122.26(b)(8).) The term MS4 means a municipal separate storm sewer system. Thus, the term “Los Angeles County MS4” already acknowledges that there are several components that make up the MS4, including city streets. Nevertheless, these references have been changed to the “Permittees’ MS4s” throughout the Order.</p>	<p>Language revised.</p>
<p>Use of LACFCD area as a jurisdictional boundary</p>	<p>The current language in Tables 1, 3, 6, and 7, Part II.B and II.D, and the Fact Sheet (Tables F-1, F-3, and F-4) that “...84 incorporated cities within the Los Angeles County Flood Control District...” implies LACFCD has jurisdiction or</p>	<p>LACFCD</p>	<p>The Order and attachments have been changed to reference MS4 discharges within the coastal watersheds of Los Angeles County rather than the Los Angeles County Flood Control District.</p>	<p>Language revised.</p>

	oversight over the municipalities. The LACFCD boundary is merely a service area boundary. The language should be revised to read "...84 incorporated cities within the Los Angeles County Flood Control District"			
Contact information	In Table 2, the contact person for the LACFCD is incorrect. Revise to: Gary Hildebrand, Assistant Deputy Director 626-458-4300 ghildeb@dpw.lacounty.gov	LACFCD	The contact information has been revised.	Table 2 revised.
Contact information	In Table 2, the contact person for the County of Los Angeles is incorrect. Revise to: Gary Hildebrand, Assistant Deputy Director 626-458-4300 ghildeb@dpw.lacounty.gov	County of Los Angeles	The contact information has been revised.	Table 2 revised.
Contact information	Facility Contact info in Table 2 should be updated as follows: 100 Civic Center Way, Calabasas CA 91302	City of Calabasas	The contact information has been revised.	Table 2 revised.
Contact information	Please update the Facility/ Discharger Information for the City of El Segundo (WDID# 4B190170001). Change the Facility Contact to: Stephanie Katsouleas, Public Works Director, skatsouleas@elsegundo.org. The Mailing: Address for the City of El Segundo is still 350 Main Street, El Segundo, CA 90245 and my contact phone number	City of El Segundo	The contact information has been revised.	Table 2 revised.

	should be (310) 524-2356.			
Contact information	The contact information should be changed as follows: Mailing Address: 1 W. Manchester Blvd, 3rd Floor Public Works Department Inglewood, CA 90301 Facility Contact: Lauren Amimoto, Senior Administrative Analyst	City of Inglewood	The contact information has been revised.	Table 2 revised.
Contact information	Please modify the City’s Facility Contact Name and Email to: Jennifer Brown, jbrown@malibucity.org , and the City Hall address to 23825 Stuart Ranch Road, Malibu, CA 90265.	City of Malibu	The contact information has been revised.	Table 2 revised.
Contact information	The City’s Facility Contact and Title in Table 2 of the Draft Tentative Order should be amended to read: “Bernardo Iniguez, Environmental Services Manager”	City of Bellflower	The contact information has been revised.	Table 2 revised.
Contact information	Also, please replace the City of Covina’s Facility Contact name listed in the Tentative Order with my name, Vivian Castro, Environmental Services Manager. The other contact information listed for the City, including my email, is correct.	City of Covina	The contact information has been revised.	Table 2 revised.
Contact information	Please correct the City of Pomona contact information on Page 6 to read as follows: Julie Carver, Environmental Programs Coordinator, Julie_Carver@ci.pomona.ca.us	City of Pomona	The contact information has been revised.	Table 2 revised.

Contact information	Please replace the City of West Hollywood's Facility Contact name listed in the Tentative Order with Sharon, City Engineer. The mailing address for the City of West Hollywood is correct.	City of West Hollywood	The contact information has been revised.	Table 2 revised.
Contact information	The open section that lists the names of the contact person, thus incorporating the names into the MS4 permit is inappropriate as City personnel are very likely to change over the next 5 or more years. Only the City titles and addresses should be listed.	Cities of Downey, Monterey Park, Temple City, Torrance; Peninsula Cities; South Bay Cities	The inclusion of permittee personnel with contact information, as of the date of Order adoption, is appropriate.	None
Findings				
Nature of Discharges and Sources of Pollutants	The finding lists the primary pollutants of concern as identified in by the LACFCD Integrated Receiving Water Impacts Report from 1994-2000. A more recent report from 1994-2005 determined constituents of concern based on the more recent mass emission monitoring data. The findings should reference the more recent 1994-2005 report that indicates the constituents of concern are: indicator bacteria, total aluminum, copper, lead, zinc, diazinon, and cyanide.	LACFCD	The finding has been revised to reflect the 1994-2005 report.	Finding revised.
Nature of Discharges and Sources of Pollutants	Primary pollutants of concern should be those identified on the 303d list for receiving waters in the LA Basin that have been identified as being impaired, not	City of Torrance; South Bay Cities	The inclusion of the LACFCD Integrated Receiving Water Impacts Report in the finding is appropriate. The reference provides a basis for watershed management prioritization. However, as noted above, the finding has been revised to reflect the 1994-2005 report.	Finding revised.

	a twelve-year-old receiving water impact report. Strike the reference to LACFCD Integrated Receiving Water Impacts Report from 1994-2000 and substitute reference to 303d list.			
Nature of Discharges and Sources of Pollutants	The finding states that stormwater and non-stormwater discharges of debris and trash are also a pervasive water quality problem in the Los Angeles Region. This finding apparently ignores the tremendous efforts made on the various Trash TMDLs. The finding should include a statement that the trash TMDLs and the significant efforts on the part of the Permittees have reduced trash generation in the various watersheds.	LACFCD	The finding has been revised to reflect the significant strides that have been made by a number of permittees in addressing discharges of debris and trash.	Finding revised.
Nature of Discharges and Sources of Pollutants	It should be clearly stated that it is not the intent of this Permit to address naturally occurring pollutants, which are outside the control of the Permittees. Other MS4 Permits, such as Order No. R8-2009-0030 (NPDES No. CAS 618030) already include such language.	County of Los Angeles	To the contrary, it is the Board's intention to regulate all pollutants, whether they are anthropogenic or naturally occurring, that are discharged from the MS4 to receiving waters. The entire purpose of a NPDES permit is to regulate discharges of "pollutants" from point sources to receiving waters. The Clean Water Act's definition of "pollutant" in section 502(6) does not distinguish between pollutants that are caused by anthropogenic or naturally occurring sources. Further, the definition of "waste" in California Water Code section 13050(d) specifically includes waste "associated with human habitation, or of human or animal origin." Even if a permittee is not able to control the source of a	None

			naturally occurring pollutant, the Clean Water Act requires permittees to control pollutants through an MS4 to receiving waters. The above notwithstanding, the Board has addressed the issue of natural sources of pollutants through its water quality standards program in the case of bacteria objectives. This Regional Board continues to discuss this issue with regard to other pollutants that are naturally occurring with other regional boards and the State Water Board.	
Permit Coverage and Facility Description	The finding inappropriately singles out LACFCD when it should address the area being covered by the permit. There are areas within the service area of the LACFCD that are not covered under the permit. The finding should also state that the MS4 also includes the street networks from all Permittees. In addition, the last paragraph should be revised as follows: “ The Los Angeles County Flood Control District <u>area covered under this Order</u> encompasses more than 3000 square miles. The LACFCD <u>This area</u> contains a vast drainage network...Maps depicting the major drainage infrastructure of the LA County MS4 area <u>covered under this Order</u> are included in Attachment C of this Order. ”	LACFCD	The finding has been revised. The definition of MS4 included in Attachment A, which is consistent with 40 CFR § 122.26(b)(8), already acknowledges that the MS4 includes street networks. Thus, no further clarification is needed on what the MS4 includes.	Finding revised.
Geographic Coverage and Watershed Management Areas	The fourth paragraph suggests that it is the responsibility of the Permittees, who do not have primary jurisdiction over entities outside the LACFCD, to address	County of Los Angeles	The fourth through eighth paragraphs of this finding factually discuss sources of discharges into receiving waters within the County of Los Angeles that are not covered by this MS4 permit. Therefore, the fourth paragraph is appropriate as-is.	None

	<p>these discharges. Unlike Order No. 01-182, which in Finding D.2 acknowledges both uncontrolled entities within the Permit coverage area and outside the area, this finding only references sources located outside the area of the LACFCD. There are dischargers within the area of the LACFCD that are beyond the control of the Permittees. These facilities are subject to the jurisdiction of the Board. This finding should be modified to reflect sources both within and without the Permit coverage area, as was done in Finding D.2 of Order 01-182.</p>		<p>The Board acknowledges that there are dischargers and sources of pollutants within the LACFCD service area that are beyond the control of the permittees. However, the permittees have ultimate authority and responsibility to prohibit, prevent, or otherwise control the discharges that enter and exit the portions of the MS4 for which they are owners and/or operators. Even if the permittees cannot control the sources or do not themselves generate the pollutants entering/exiting their MS4s, the permittees are nevertheless responsible for ensuring that the pollutants do not reach receiving waters through their MS4. As recently stated by the 9th Circuit Court of Appeals, “the Clean Water Act does not distinguish between those who add and those who convey what is added by others - the Act is indifferent to the originator of water pollution.” (<i>NRDC v. County of Los Angeles</i> (2011) 673 F.3d 880, 900.) Thus, the Clean Water Act, and this permit, appropriately places responsibility for preventing or controlling illicit discharges on the permittees.</p>	
<p>Geographic Coverage and Watershed Management Areas</p>	<p>The finding states " ... each Permittee shall maintain the necessary legal authority to control the contribution of pollutants to its MS4 and shall include in its storm water management program a comprehensive planning process that includes intergovernmental coordination, where necessary." If the MS4/catch basin is owned by the LACFCD, does this mean that the LACFCD needs to control the contribution of pollutants?</p>	<p>LA Permit Group</p>	<p>Co-permittees must comply with permit conditions relating to discharges from the MS4s (including catch basins) for which they are owners or operators. (40 CFR § 122.26(a)(3)(vi)).</p>	<p>None</p>
<p>MS4 Requirements</p>	<p>The last paragraph of this finding misstates the</p>	<p>County of Los Angeles</p>	<p>The finding has been revised to use the exact language from the Clean Water Act, which requires MS4 permits</p>	<p>Finding revised.</p>

	requirements of the CWA. There is no provision in the CWA that requires the Board to include “other provisions that the Regional Water Board determines necessary for the control of pollutants in MS4 discharges in order to achieve water quality standards.” As the 9 th Circuit held in <i>Defenders of Wildlife v. Browner</i> , the state has “discretion” to require stormwater discharges to achieve water quality standards, but also the discretion not to require such controls.		include “other provisions the Regional Water Board has determined appropriate for the control of such pollutants.”	
Water Quality Control Plans	Please remove table 6- confusing and seems to assume all reaches have all beneficial uses. List the uses by watershed if necessary to list, but do not assign the uses to all bodies of water from all outfalls	City of Santa Clarita	Table 6 is not meant to be a detailed listing of the beneficial uses applicable to each surface water body and reaches. Before Table 6, the finding states: “Beneficial uses applicable to the surface water bodies that receive discharges from the Los Angeles County MS4 <i>generally</i> include those listed below.”(emphasis added.)	None
Total Maximum Daily Loads	Please remove language in last paragraph of Finding J.1. regarding interagency. Cities do not have authority over other agencies' discharges.	City of Santa Clarita	The finding does not state that Permittees have control or authority over another Permittee’s discharges. As noted in the finding, federal regulations state that co-permittees need only comply with permit conditions relating to discharges from the MS4 for which they are owners or operators (40 CFR § 122.26(a)(3)(vi)). Federal regulations, however, also require that permittees include in its storm water management program a comprehensive planning process that includes intergovernmental coordination, where necessary. Given the interconnected nature of the permittees’ MS4s, the Board expects permittees’ to work cooperatively to facilitate compliance efforts through inter-agency agreements or other formal arrangements.	None

Endangered Species Act	Clarify that L.I.D. Ordinances and Developer required L.I.D. exemptions include preserving flows to established freshwater ecosystems that have been identified by a Naturalist would be degraded by having dry and wet weather run off diverted	City of Torrance	The Order does not mandate diverting all flows. Rather, permittees must implement LID BMPs that attempt to mimic the runoff volume and duration of an undeveloped parcel. Permittees may develop its LID ordinance to preserve freshwater ecosystems. In implementing LID BMPs and developing LID ordinances, permittees are responsible for meeting all requirements of the federal and state Endangered Species Acts.	None
Economic Considerations	Please show this exceeds federal standards through stricter interpretation of rules than is required under the Clean Water Act.	City of Santa Clarita	The Board disagrees. The requirements in the permit are not more stringent than the minimum federal requirements. While a Water Code section 13241 analysis is not required, the Board has nevertheless considered the factors in section 13241. That analysis is provided in the Fact Sheet.	None
<i>Permit Application</i>				
Permit Application	The Board has no authority to issue a combined system-wide MS4 permit to parties, such as Signal Hill and LACFCD, who filed separate Reports of Waste Discharge (ROWD) requesting individual permits and who have not agreed to be included as co-permittees in a combined system-wide permit. Pursuant to 40 CFR section 122.26(a)(3)(iii), any individual MS4 operator has the right to apply for and obtain its own individual permit. No individual MS4 permittee can be forced, against its will and without the agreement of the various other jurisdictions to be included in the combined system-wide permit.	City of Signal Hill; LACFCD	While federal regulations do allow individual MS4 owners/operators to apply for individual permits, the Regional Water Board retains the discretion as the permitting authority to determine whether to actually issue an individual permit. The Board has the authority to issue permits for discharges from MS4s on a system-wide or jurisdiction-wide basis. (CWA § 402(p)(3)(B)(i); 40 CFR section 122.26, subdivisions (a)(1)(v), (a)(3)(ii), and (a)(3)(iv)). USEPA's responses to comments for its regulations pertaining to large and medium MS4s also make it clear that the permitting authority has the flexibility to establish system- or region-wide permits. In the Final Rule published in the Federal Register and containing its responses to comments, USEPA noted that section 122.26(a)(3)(iv) would allow an entire system in a geographical region under the purview of a State agency to be designated under a permit. (55 Fed. Reg. 47990, 48042.) USEPA also indicated that many commenters wanted to allow permitting authorities broad discretion to establish system-wide permits, and that USEPA believed that section 122.26, subdivisions (a)(1)(v) and (a)(3)(ii),	None

			<p>allowed for such broad discretion. (<i>Id.</i> pp. 48039-48043.)</p> <p>Because of the complexity and networking of the MS4 within Los Angeles County, which often results in commingled discharges, the Regional Water Board has previously adopted a system-wide approach to permitting MS4 discharges within Los Angeles County. In evaluating the separate ROWDs and the factors described in 40 CFR § 122.26(a)(1)(v), the Regional Water Board again considered the appropriateness of permitting discharges from MS4s within Los Angeles County on a system-wide or jurisdiction-wide basis or a combination of both. Based on that evaluation, as detailed in the Fact Sheet of the tentative permit, the Regional Water Board again determined that, because of the complexity and networking of the MS4 within Los Angeles County, that one system-wide permit is appropriate. However, in order to provide individual permittees with more specific requirements, certain provisions of the tentative permit are organized by watershed management area, which is appropriate given the requirements to implement 33 watershed-based TMDLs. In addition, because the LACFCD owns and/or operates large portions of the MS4 infrastructure in each coastal watershed management area within Los Angeles County, the LACFCD should remain a permittee in the single system-wide permit. However, as requested by LACFCD, the tentative permit relieves LACFCD of its role as “Principal Permittee.” Further, a separate section in the permit that describes the minimum control measure requirements applicable to the LACFCD has been added to the permit, reflecting the different institutional structure and land use authority of the LACFCD as compared to the other permittees.</p>	
Permit Application	Federal regulations pertaining to small MS4 permittees make clear that Signal Hill cannot be forced into a joint system-wide	City of Signal Hill	The federal regulations pertaining to small MS4s are not applicable. The City of Signal Hill is appropriately regulated under the regulations pertaining to large and medium MS4s. Under the Phase I regulations, USEPA	None

	NPDES permit (citing 40 CFR section 122.33)		required NPDES permit coverage for discharges from medium and large MS4s with populations of 100,000 or more. The USEPA and the Regional Water Board have classified the Greater Los Angeles County MS4 as a large MS4 pursuant to 40 CFR section 122.26(b)(4) due to the total population of Los Angeles County, including that of unincorporated and incorporated areas, and the interrelationship between the MS4s throughout Los Angeles County. The total population of the cities and County unincorporated areas covered by the 2001 permit was 9,519,338 in 2000 and has increased to 9,818,605 in 2010, according to the United States Census.	
Permit Application	If the Board does not delete LACFCD from the permit and issue LACFCD a separate individual permit, the Board should include a separate chapter in the permit that clearly describes the requirements applicable to the LACFCD.	LACFCD	A separate section in the permit that describes the minimum control measure requirements applicable to the LACFCD has been added to the permit.	New section added.
Permit Application	The permit is not a system-wide permit because the Board has specifically excluded the City of Long Beach from the permit, even though that city's MS4 is as much a part of the regional storm sewer "system" (and its area as much a part of the watersheds) as those MS4s and cities included under the Permit. The Board has provided no justification for excluding Long Beach. Providing Long Beach a separate permit, but denying the same to Signal Hill, who is entirely surrounded by Long Beach, is proof positive that	City of Signal Hill; LACFCD	The Board decided in 1999, over a decade ago, to issue a separate MS4 permit to the City of Long Beach, in response to the City's request and its submittal of a complete ROWD. Over the last decade, the City of Long Beach has developed and implemented a robust individual monitoring and reporting program to characterize water quality and track implementation of permit requirements within the City. The Board found that the City's proven track record in implementing its individual permit over the past decade and its readiness to work cooperatively with permittees in the Los Angeles County MS4 Permit on watershed based implementation supported its continued desire to operate under an individual permit.	None

	there is no rational justification for not providing Signal Hill with its own separate permit.			
Permit Application	LACFCD, while a significant MS4 operator in LA County, is not the “primary owner and operator of the Los Angeles County MS4.” Even if the county-wide MS4 were considered a single system, since city streets form the single most significant part of the County MS4, and the LACFCD owns or operates no streets, there would be no support for such a finding. That language should be deleted.	LACFCD	References to LACFCD being the “primary owner and operator” have been removed.	Language deleted
Permit Application	The statement that LACFCD should remain a Permittee in a single system-wide permit because it is the primary owner and operator of the Los Angeles County MS4 is misleading since it does not acknowledge that MS4 also includes streets and roads. As such, other Permittees also own and operate a significant portion of the LA County MS4. The language should be revised to read: “The Regional Water Board also determined that as the primary owner and operator of the Los Angeles County MS4, because it operates MS4 infrastructure in each watershed management area, the LACFCD should remain a Permittee in the single system-wide permit;...”	LACFCD	As noted above, references to LACFCD being the “primary owner and operator” have been removed. Changes reflecting LACFCD as owning and/or operating portions of the MS4 infrastructure in each coastal watershed management area within Los Angeles County have been made.	Language revised.

<p>Permit Application</p>	<p>The Fact Sheet cites consideration of the large interconnected nature of the Los Angeles County MS4 system and the fact that the discharges from multiple cities often co-mingle in the MS4 prior to discharging to receiving waters in evaluating the Reports of Waste Discharge (ROWDs) requesting separate MS4 permits. This factor should not preclude the City of Signal Hill from having its own separate permit. The City discharges to both the Los Angeles River and the Los Cerritos Channel through the City of Long Beach that already has a separate MS4 permit</p>	<p>City of Signal Hill</p>	<p>This factor does not “preclude” the City from having its own permit. The Board has the authority to issue a jurisdiction-wide or system-wide permit. In issuing this system-wide permit, the Board considered <i>all</i> of the factors identified in the Fact Sheet combined.</p> <p>Further, it should be noted that the Board determined in 2006 that the City of Signal Hill’s ROWD did not satisfy federal regulations. Accordingly, the Board deemed the City’s ROWD incomplete. The City did not submit a complete ROWD thereafter. Had the City submitted a complete ROWD, the Board could have taken that into consideration in issuing this permit. Board staff has met with City representatives and explained that the City must submit a complete ROWD, consistent with the CWA and implementing regulations, to the Board that outlines the programs that the City will implement before Board staff can consider recommending issuance of a separate permit.</p>	<p>None</p>
<p>Permit Application</p>	<p>The fact sheet asserts that having separate permits would make implementation of TMDLs more cumbersome. The City of Signal Hill strongly disagrees with this assertion. The City led the organization of Jurisdictional Group 1 for the Los Angeles River Metals TMDLs and accommodated the withdrawal of the City of Los Angeles and the County of Los Angeles by organizing the remaining cities and Caltrans through MOAs with the Gateway Council of Governments. The City of Long Beach is one of the cities in Jurisdiction Group 1, and both Caltrans and the City of Long</p>	<p>City of Signal Hill</p>	<p>Board staff has met with City representatives and explained that the City must submit a complete ROWD to the Board that outlines the programs that the City will implement before Board staff can consider recommending issuance of a separate permit.</p>	<p>None</p>

	<p>Beach have separate MS4 permits. Because all the entities are subject to the same metals TMDLs and have organized themselves pursuant to MOAs with the Council of Governments, having separate permits has absolutely no impact the ability of the entities within the Jurisdictional Group to work together to implement the TMDLs</p>			
<p>Permit Application</p>	<p>The third factor mentioned in the Fact Sheet is the passage of AB 2554, the development of the County's Water Quality Funding Initiative, and the fact that 50% of the funding is allocated to Watershed Authority Groups (WAGs) to implement collaborative water quality improvement plans. Long Beach, with its separate permit, is in two of the WAGs. Furthermore, the WAGs are to be organized as joint powers authorities, so the fact that one or more Permittee might have a separate MS4 permit will have no impact.</p>	<p>City of Signal Hill</p>	<p>Board staff has met with City representatives and explained that the City must submit a complete ROWD to the Board that outlines the programs that the City will implement before Board staff can consider recommending issuance of a separate permit.</p>	<p>None</p>
<p>Permit Application</p>	<p>A fourth factor apparently considered by Regional Board staff was the results of the on-line survey administered by the Regional Board staff. The fact that only four Permittees expressed a preference for individual permits is not</p>	<p>City of Signal Hill</p>	<p>This permit does not require a one-size-fits-all approach. The Board has determined that this permit ensures consistency and equitability in regulatory requirements within Los Angeles County, while watershed-based sections within the permit provides flexibility to tailor permit provisions to address distinct watershed characteristics and water quality issues.</p>	<p>None</p>

	justification for a single, one-size-fits-all, approach			
Permit Application	Furthermore, issuing a separate MS4 permit will not end the City’s leadership in responding to multiple TMDLs nor place undue burdens on the Regional Water Board. The City is committed to continuing to organize and lead the 42 entities in the Los Angeles River Watershed with respect to coordinated monitoring and special studies. We are also committed to working with the entities in Jurisdictional Group 1 for the Los Angeles River Metals TMDLs and with the cities in the Los Cerritos Channel Watershed. In addition, we will be working with multiple jurisdictions to address several TMDLs.	City of Signal Hill	The Board acknowledges that the City of Signal Hill has lead and implemented programs to comply with TMDLs. Board staff has met with City representatives and explained that the City must submit a complete ROWD to the Board that outlines the programs that the City will implement before Board staff can consider recommending issuance of a separate permit.	None
Permit Application	With respect to the extra work for the Regional Water Board, there should not be much. Since the Tentative Order for the new Los Angeles County MS4 permit does not include a Principal Permittee, each Permittee will submit its own annual report and presumably its own Report of Waste Discharge (ROWD) 180 days prior to the Order expiration date. In addition, Permittees and/or Watershed Monitoring Programs will be submitting monitoring	City of Signal Hill	Board staff has met with City representatives and explained that the City must submit a complete ROWD to the Board that outlines the programs that the City will implement before Board staff can consider recommending issuance of a separate permit.	None

	plans, multiple monitoring reports, and financially supporting regional studies			
Permit Application	One other reason that there should not be undue burden placed on Regional Water Board staff as a result of giving the City of Signal Hill its own permit is that the structure of the Tentative Order is such that it could easily be converted to an individual permit. We expect we would be subject to essentially the same requirements as the others cities in the County. However, the number of attachments would be fewer since we are not subject to all 33 of the TMDL documents being addressed in the Tentative Order. To assist Regional Board staff, we would be willing to prepare a suggested revision in Word “track changes” mode to facilitate development of a separate MS4 permit for the City	City of Signal Hill	Board staff has met with City representatives and explained that the City must submit a complete ROWD to the Board that outlines the programs that the City will implement before Board staff can consider recommending issuance of a separate permit.	None
Permit Application	We agree with Member Glickfeld that the permit should provide a variety of options. One option that we would like to see is for proactive cities, especially those in multiple watersheds, to receive separate permits. Such separately permitted cities could still work with watershed or sub-watershed groups through Memoranda of Agreement to address TMDL implementation	City of Signal Hill	This permit does provide a variety of options for permittees to demonstrate compliance with the terms of the permit. As noted above, this permit does not require a one-size-fits-all approach. The Board has determined that this permit ensures consistency and equitability in regulatory requirements within Los Angeles County, while watershed-based sections within the permit provides flexibility to tailor permit provisions to address distinct watershed characteristics and water quality issues. Board staff has met with City representatives and	None

	and other water quality issues. Given its unique geographic characteristics, its industrial heritage, its comprehensive and effective stormwater quality program, and its regional leadership in organizing municipalities to address water quality problems in multiple watersheds, the City of Signal Hill should be given its own MS4 permit		explained that the City must submit a complete ROWD to the Board that outlines the programs that the City will implement before Board staff can consider recommending issuance of a separate permit.	
ROWD	Please clarify why the ROWD was insufficient and provide a copy of the USEPA Interpretative Policy Memorandum of Reapplicaton referenced.	City of Santa Clarita	<p>The reasons identified in the Regional Board’s July 2006 letter to Mark Pestrella are:</p> <ul style="list-style-type: none"> • The elimination of Local SWPPP for sites 1 acre and greater. • The proposal to include TMDL requirements only in memorandum of understanding in lieu of TMDL WLAs included in NPDES Permits as required by Federal regulations <p>The USEPA Interpretive Policy Memorandum on Reapplication Requirements for Municipal Separate Storm Sewer Systems, Final Rule, August 9, 1996, is published in Volume 61 of the Federal Register on pages 41698-41699.</p>	None
<i>Technology Based Effluent Limitations (TBELs)</i>				
TBELs	<p>Part IV.A.1 of the tentative order states that TBELs shall reduce pollutants in storm water discharges from the MS4 to the maximum extent practicable (MEP).</p> <p>It is not clear as to the reason for including TBELs into the tentative order because they are generally not required of Phase</p>	Cities of Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, San Gabriel and West Covina	Section 301(b)(1)(A) of the CWA and 40 CFR section 122.44(a) require that NPDES permits include technology based effluent limitations. In 1987, the CWA was amended to require that municipal storm water discharges “reduce the discharge of pollutants to the maximum extent practicable.” (CWA § 402(p)(3)(B)(iii).) The “maximum extent practicable” (MEP) standard is the applicable federal technology based standard that MS4 owners and operators must attain to comply with their NPDES permits. Thus, to comply with CWA sections 301 and	None

	<p>MS4 permits. TBELS are referenced in the tentative order, but are not found under section 402(p), which addresses storm water, nor anywhere else in federal regulations. It is a term used to collectively refer to best available technologies, but again not in 402(p). If clarification or justification cannot be provided, the TBEL provision should be removed.</p>		<p>402 for MS4 discharges, MS4 permits must, at a minimum, include effluent limitations to meet the technology-based MEP standards. A technology based effluent limitation is based on the capability of a model treatment method to reduce a pollutant to a certain concentration (NPDES Permit Writer’s Manual, Appendix A).</p>	
<p>TBELs</p>	<p>A technology-based effluent limitation (TBEL) is established on the basis of the capabilities of available technologies, as opposed to the MEP, to control and reduce discharges of pollutants. The TBEL is established in accordance with technological standards set forth in the CWA: the best practicable control technology currently available (BPT), applicable to discharges of any constituents defined as pollutants under the Clean Water Act; the best available technology economically achievable (BAT), applicable to discharges of pollutants listed as toxic under the CWA; and best conventional pollutant control technology (BCT), applicable to discharges of pollutants listed as conventional under the CWA. [33 U.S.C Section 1314(b).]</p> <p>Proposed Solution- Revise the</p>	<p>City of Vernon</p>	<p>Section 301(b)(1)(A) of the CWA and 40 CFR section 122.44(a) require that NPDES permits include technology based effluent limitations. In 1987, the CWA was amended to require that municipal storm water discharges “reduce the discharge of pollutants to the maximum extent practicable.” (CWA § 402(p)(3)(B)(iii).) The “maximum extent practicable” (MEP) standard is the applicable federal technology based standard that MS4 owners and operators must attain to comply with their NPDES permits. Thus, to comply with CWA sections 301 and 402 for MS4 discharges, MS4 permits must, at a minimum, include provisions to meet the technology-based MEP standards. A technology based effluent limitation is based on the capability of a model treatment method to reduce a pollutant to a certain concentration (NPDES Permit Writer’s Manual, Appendix A).</p>	<p>None</p>

	Tentative Permit to provide accurate and non-conflicting provisions that are consistent with the federal Clean Water Act.			
TBELs	The Fact Sheet states that “Section 301(b)(1)(A) of the CWA and 40 CFR section 122.44(a) require that NPDES permits include technology based effluent limits” and that the MEP standard is the “applicable federal technology based standard that MS4 owners and operators must attain to comply with their NPDES permits.” The MEP standard is “technology-based,” in the sense that it does not require compliance with water quality standards, but not in the sense that it is a technology based effluent limit derived from CWA Section 301. Footnote 16 of the Fact Sheet accurately states this distinction.	County of Los Angeles	The statements in the Fact Sheet, as written, are accurate. The Board agrees that the MEP standard is just that, a standard. It is not, in and of itself, a technology based effluent limit. Rather, to comply with sections 301 and 402 of the Clean Water Act, MS4 permits must, at a minimum, include effluent limitations necessary to achieve compliance with the technology-based standard to reduce pollutants to the “maximum extent practicable.	None
Effluent Limitations	Revise Effluent Limitations to be Technology Based Effluent Limitations as approved in Watershed Management Program	City of Torrance	The permit provides permittees the flexibility to demonstrate compliance with the MEP standard and interim water quality based effluent limitations through an approved Watershed Management Program.	None
<i>Standard Provisions</i>				
Attachment D	Section I.A.2, or any similar provision, is not in the current MS4 Permit. This provision establishes standards and prohibitions Permittees must comply with which are not	City of Vernon	The standard provisions in Attachment D are required by sections 122.41 and 122.42 of Title 40 of the Code of Federal Regulations. Section 122.41 states: “The following conditions apply to all NPDES permits. Additional conditions applicable to NPDES permits are in § 122.42. All conditions applicable to NPDES permits	None

	<p>specified in this Order. As the Tentative Permit is currently written (without the subject provision) it will already be an economical, logistical, scientific, legal, and likely “impossible” challenge to achieve compliance. Responsible planning and spending of limited public resources cannot be performed for items outside of the Tentative Permit. This provision is not sustainable. The City of Vernon insists that this provision be omitted.</p>		<p>shall be incorporated into the permits expressly or by reference.” For clarity and ease of reference, the Board has opted to incorporate the standards provisions expressly into the permit.</p> <p>The requirement in Section I.A.2. of Attachment D is required by section 122.41(a)(1).</p>	
Legal Authority	<p>The reference to construction activity and construction sites in Part VI.A.2.a.i. should be deleted. Federal regulations only require permittees to control pollutants to the MS4 by storm water discharges associated with industrial activity. Such discharges may be required to be controlled under other provisions, such as those prohibiting illicit discharges.</p>	<p>County of Los Angeles; LA Permit Group; Vernon</p>	<p>The reference to construction activity and construction sites is consistent with the existing requirement in the 2001 permit. The reference is still appropriate as permittees must have legal authority to control discharges to the MS4. (40 CFR § 122.26, subds. (d)(1)(ii) and (d)(2)(i).) Further, permittees are required to develop, implement, and enforce controls to reduce the discharge of pollutants from MS4s which receive discharges from construction sites. (<i>Id.</i> § 122.26, subds. (d)(2)(iv)(A)(2) and (d)(2)(iv)(D).) Accordingly, permittees must have adequate legal authority to carry out these requirements.</p>	<p>None</p>
Legal Authority	<p>The reference to grading ordinances in Part VI.A.2.i. should be removed, as this specification of the method of compliance violates Water Code § 13360.</p>	<p>County of Los Angeles; LA Permit Group; Vernon</p>	<p>As municipalities, the permittees routinely issue grading and building permits to construction site operators. In accordance with federal regulations, permittees must implement a construction program that applies to all activities involving soil disturbance, including grading. Accordingly, permittees must have adequate legal authority to update grading ordinances necessary to comply with these requirements.</p> <p>As explained in greater detail below, the commenter’s reference to Water Code section 13360 is misplaced.</p>	<p>None</p>

			<p>That section involves enforcement and implementation of state water quality law, not compliance with the federal Clean Water Act. The Regional Water Board, as the permitting agency, has discretion to decide what practices, techniques, methods and other provisions are appropriate and necessary to control the discharge of pollutants. However, even if Water Code section 13360 applies, the permit does not violate the statute. This requirement does not set forth a specific method of compliance or “fix” on permittees, but rather sets forth limitations, standards, guidelines, and/or goals to be achieved or attained in order to meet the requirements of the Clean Water Act.</p>	
<p>Legal Authority</p>	<p>Part VI.A.2.a.i The authority to control the contribution of pollutants from both industrial and construction sites, through an NPDES permit, is bestowed upon the SWRCB and RWQCBs. Those sites which are subject to a State permit should be regulated by the State. It is not the local permittee’s responsibility to enforce all conditions of the industrial or construction site’s statewide NPDES permit. Such enforcement is the responsibility of the State Water Board as the issuer of said permit. In addition, a failure of a construction or industrial permittee to prevent discharge of pollutants (violation of the State stormwater permit) would likely result in a violation for the Municipal Permittee. If this is indeed a joint effort of the Water Board and the</p>	<p>City of Vernon; City of Malibu</p>	<p>Federal law requires that MS4 permittees control the contribution of pollutants to the MS4 from industrial and construction sites, regardless of whether a regional Board or the State Board is also exercising its own independent authority to regulate industrial and construction sites. This provision is consistent with the existing requirement in the 2001 permit. Permittees are required to develop, implement, and enforce controls to reduce the discharge of pollutants from MS4s which receive discharges from industrial and construction sites. (<i>Id.</i> § 122.26, subds. (d)(1)(ii), (d)(2)(i), (d)(2)(iv)(A)(2), (d)(2)(iv)(C), and (d)(2)(iv)(D).) Accordingly, permittees must have adequate legal authority to carry out these requirements. Further, as discussed in greater detail in Sections VI.C.5. and VI.C.7. of the Fact Sheet, both the Los Angeles County Superior Court and the California Court of Appeal have specifically rejected arguments that the State and Regional Water Boards improperly delegated to permittees its inspection duties and that permittees were being required to conduct inspections for facilities covered by other state-issued general NPDES permits. The courts noted that obligations under state-issued permits were separate and distinct, and that there was no duplication of efforts and no shifting of inspection</p>	<p>None</p>

	<p>Municipal Permittee (as stated by LARWQCB during the July 9, 2012 workshop), why are the permit fees not shared with the Municipal Permittees and why is the Municipal Permittee the only culpable agency receiving a violation?</p>		<p>responsibility in derogation of the Regional Board’s responsibility. <i>In re L.A. Cnty. Mun. Storm Water Permit Litig.</i> (L.A. Super. Ct., No. BS 080548, Mar. 24, 2005), Statement of Decision from Phase II Trial on Petitions for Writ of Mandate, pp. at 17-18; <i>City of Rancho Cucamonga v. Regional Water Quality Control Board-Santa Ana Region</i> (2006) 135 Cal.App.4th 1377, 1389-1390.)</p> <p>State collected fees under the general permits pay for the State’s oversight of storm water sites and facilities, which as noted is a separate obligation from that of the municipalities MS4 obligations under federal law.</p>	
<p>Legal Authority</p>	<p>In section VI.A.2.a.vii, the draft permit states that [permittees shall] "control the contribution of pollutants from one portion of the shared MS4 to another portion of the MS4 through interagency agreements among Co-permittees." The intent and scope of this provision is not clear. For example, it is not clear which permittees or which portions of the MS4 this is intended to cover. Please clarify what a “Shared MS4” means, as that is not a defined term. Additionally, if you can please provide some clarification as to what this provision is attempting to accomplish, permittees will be better able understand if they have the legal authority to comply with this mandate. Without additional information, it is difficult to determine the scope of this proposed requirement.</p>	<p>City of Malibu</p>	<p>This provision is required by 40 CFR § 122.26(d)(2)(i)(C). The provision acknowledges that, given an interconnected MS4 (such as that within Los Angeles County), permittees are expected to work cooperatively to facilitate compliance efforts through inter-agency agreements. For example, there may be instances where discharges from two cities commingle and the cities may enter into an agreement to implement load reduction measures.</p>	<p>None</p>
<p>Legal Authority</p>	<p>The Regional Board cannot</p>	<p>Cities of Agoura</p>	<p>The Board is not requiring permittees to enter into</p>	<p>None</p>

	require the Cities to enter into interagency agreements (p. 39) or coordinate with other co-permittees as part of their stormwater management program (pp. 56-58). The Permit creates the potential for City liability in circumstances where the permittee cannot ensure compliance due to the actions of third party state and local government agencies over which the Cities have no control.	Hills, Artesia, Beverly Hills, Hidden Hills, La Mirada, Monrovia, Norwalk, Rancho Palos Verdes, San Marino, South El Monte, and Westlake Village	interagency agreements or coordinate with other co-permittees. The Board, however, is requiring that permittees have the legal authority to do so. Consistent with federal regulations at 40 CFR § 122.26(d)(2)(i)(D), permittees must have legal authority to “[c]ontrol through interagency agreements among coapplicants the contribution of pollutants from one portion of the municipal system to another portion of the municipal system.” The Board certainly encourages co-permittees to enter into such agreements and coordinate their actions. As the MS4 is a system shared by several permittees, cooperation and coordination between co-permittees would result in efficient and cost-effective actions to comply with the permit.	
Legal Authority	For Part VI.A.2.a.viii., regulations require legal authority for agreements between co-Permittees, but not between non-Permittees. This provision should be deleted.	County of Los Angeles	This provision is appropriate as some portions of the MS4 owned and/or operated by the California Department of Transportation connect with portions of the Permittees' MS4s. In these cases, MS4 discharges from Caltrans highways and facilities commingle with those of the Permittees prior to being discharged to receiving waters. The provision acknowledges that, given an interconnected MS4 (such as that within Los Angeles County), MS4 permittees are expected to work cooperatively with other MS4 owners and operators to facilitate compliance efforts through inter-agency agreements.	None
Legal Authority	Section VI.A.2.a.viii It is not clear how the Regional Board expects permittees to meet this requirement. Please provide examples of interagency agreements that would be applicable and effective to meet this requirement. The City fails to grasp the importance of interagency agreements for all permittees and	City of Malibu; City of Torrance; South Bay Cities	The Board is not requiring permittees to enter into interagency agreements. The Board, however, is requiring that permittees have the legal authority to do so. Consistent with federal regulations at 40 CFR § 122.26(d)(2)(i)(D), permittees must have legal authority to “[c]ontrol through interagency agreements among coapplicants the contribution of pollutants from one portion of the municipal system to another portion of the municipal system.” The Board certainly encourages co-permittees to enter into such agreements and coordinate their actions. As the MS4 is a system shared by several	None

	finds it to be an excessive requirement. Instead, this provision should be changed to suggest that permittees consider adopting interagency agreements where necessary to establish responsibilities when an MS4 is substantially shared by multiple agencies.		<p>permittees, and even some non-permittees such as the California Department of Transportation, cooperation and coordination with other owners and operators of the MS4 would result in efficient and cost-effective actions to comply with the permit.</p> <p>An example of an interagency agreement could result from a situation where discharges from two cities commingle and the cities enter into an agreement to implement load reduction measures.</p>	
Legal Authority	VI. A. 2. a. vii. and viii. Please remove. Cities are not responsible for other agencies' discharges. Agreements between the permittees and other agencies is at the discretion of City Councils.	City of Santa Clarita	These provisions do not state that one permittee is responsible for other agencies' discharges. As noted in the permit, federal regulations states that co-permittees must comply with permit conditions relating to discharges from the MS4s for which they are owners or operators. (40 CFR § 122.26(a)(3)(vi)). Federal regulations, however, also require that permittees include in its storm water management program a comprehensive planning process that includes intergovernmental coordination, where necessary. Given the interconnected nature of the permittees' MS4s, the Board expects permittees' to work cooperatively to facilitate compliance efforts through inter-agency agreements or other formal arrangements.	None
Legal Authority	Part VI.A.2.a.i., iv., vii., and viii. The word "control" in these provisions erroneously suggests permittees have discretionary authority to authorize the contribution of pollutants, discharge of spills, and the contribution of pollutants to its MS4. In addition, these sections also conflict with Parts VI.A.2.a.ii., iii., ix., and the Illicit Discharge/Connection Elimination Program which cite the word "prohibit".	City of Vernon	The term "control" is consistent with language in the federal regulations pertaining to legal authority for MS4 owners and operators. (See 40 CFR § 122.26(d).) Therefore, the use of the term is appropriate.	None

	Proposed solution- Replace the word “control” with the word “prohibit” to be consistent with Section 402(p)(B)(ii) of the federal Clean Water Act.			
Legal Authority	For Part VI.A.2.a.ix., federal regulations only require that Permittees have legal authority to carry out inspections to determine compliance with permit conditions, “including the prohibition on illicit discharges to the municipal separate storm sewer.” 40 CFR § 122.26(d)(2)(i)(F). There is no requirement in the CWA or the regulations for the control of discharges into “receiving waters,” but rather discharges into the MS4.	County of Los Angeles	The requirement is appropriate. As the commenter notes, 40 CFR § 122.26(d)(2)(i)(F) requires that permittees have legal authority to carry out inspections and monitoring necessary “to determine compliance with permit conditions...” Consistent with the 2001 permit, the permit prohibits non-storm water discharges from reaching receiving waters, which is wholly consistent with Congress’ ultimate intent in the CWA and USEPA’s regulations that such non-storm water discharges not reach receiving waters. (55 Fed. Reg. 47990, 47997 [“The entire thrust of today’s regulation is to control pollutants that enter receiving water from storm water conveyances.”].)	None
Legal Authority	Part VI.A.2.a.ix Does this requirement mean the Permittee must have legal authority to enter every private property? This requirement is vague and unclear. Typically, the City obtains authority to enter private property by either a) receiving consent of the owner to enter the property to carry out inspections etc, or b) obtaining an inspection warrant from the court by providing sufficient evidence why an inspection warrant is required. Please clarify the scope of the legal authority for inspections that is being proposed in the permit.	City of Malibu; City of Torrance	This provision is consistent with the existing requirement in the 2001 MS4 permit and federal regulations at 40 CFR § 122.26(d)(2)(i)(F). Permittees must have adequate legal authority to control the contribution of pollutants to the MS4, even if those pollutants originate from private property. Permittees therefore must have legal authority to enter private property (in accordance with applicable laws) to abate the discharges of pollutants through the MS4 to receiving waters. In cases where pollutants originate from private property, and the permittees is unable to gain access to the property, it is possible that the permittee can abate the discharges without entering the private property (such as preventing the discharge from reaching the MS4).	None

<p>Legal Authority</p>	<p>Part VI.A.2.b. - The requirement to submit statement certified by chief legal counsel annually makes no difference to an agency’s legal authority and has no impact on water quality and there are far too many certifications and submittals in this order that could easily result in non-compliance. Revise the statement to “Each Permittee shall submit this certification as part of the first Annual Report under this Order.”</p>	<p>City of Torrance</p>	<p>This requirement has been revised to allow permittees to submit the certification statement annually beginning with the first Annual Report required under this Order, which will be December 15, 2013.</p>	<p>Language revised.</p>
<p>Legal Authority</p>	<p>Part VI.A.2.b - To sign this statement, chief counsel will have to analyze this 500 page Permit, analyze the municipal code, and prepare a statement as to whether actions can be commenced and completed in the judicial system. An annual certification is redundant and unnecessary in addition to being extraordinarily costly. At most, legal analysis should be done once during the Permit term. Otherwise, please delete this requirement.</p>	<p>LA Permit Group</p>	<p>Annual certification is appropriate and necessary to ensure that permittees have the requisite legal authority, and maintain that authority, to carry out the terms of the permit. Assuming that a permittee has the requisite legal authority, and there are no changes to that legal authority during the permit term, the Board does not believe annual certification would be costly or burdensome.</p>	<p>None</p>
<p>Fiscal Resources</p>	<p>Numerous commenters objected to the inclusion of Part VI.A.3.a. that states “Each Permittee shall exercise its full authority to secure the fiscal resources necessary to meet all requirements of this Order.” The commenters asserted this provision is not required by federal law, is not an existing</p>	<p>Cities of Bradbury, Santa Monica, Vernon, Santa Clarita, Signal Hill, Torrance, La Verne; Peninsula Cities; South Bay Cities; and County of Los Angeles</p>	<p>The requirement has been deleted. Accordingly, there is no need to respond to the substance of the comments.</p>	<p>Requirement deleted.</p>

	requirement, is an impossible requirement to meet, infringes on the authority of municipal governments to prepare budgets, and/or is an unfunded state mandate.			
Fiscal Resources	The SWRCB and LARWQCB should initiate and support a proposal for a statewide stormwater tax. Furthermore, the SWRCB should distribute funds collected through the General Industrial and Construction Activity Stormwater Permits to the Permittees to support the required inspections of these permitted facilities.	City of Vernon	Municipalities must secure their own fiscal resources. The Board, however, notes that the State Water Board offers many grants and low-interest loans that permittees can apply for, if eligible. State collected fees under the general permits pay for the State’s oversight of storm water sites and facilities, which is a separate obligation from that of the municipalities MS4 obligations under federal law.	None
Fiscal Resources	VI.A.3.c. ... shall conduct a fiscal analysis of the annual cost . . . This task requires staff time away from other tasks; or consultant, e.g. cash from completely encumbered budget or pay for this analysis with funds normally used to install BMPs; what if analysis shows a city doesn't have the cash to comply? Will voters pass a new tax?	City of Santa Monica	This provision is consistent with existing requirements in the 2001 MS4 permit. The provision is also required by federal regulations at 40 CFR § 122.26(d)(2)(vi), which states that “For each fiscal year to be covered by the permit, a fiscal analysis of the necessary capital and operation and maintenance expenditures necessary to accomplish the activities of the [storm water management] programs...Such analysis shall a description of the source of funds that are proposed to meet the necessary expenditures, including legal restrictions on the use of such funds.”	None
Fiscal Resources	In the standard provision, please add a spending cap. Recently, the US Conference of Mayors suggested that, nationwide, permittees should be found in compliance if the community has spent the equivalent of 2% of the household median income or if	City of Santa Clarita	There is no basis in the CWA for including such a provision. The permit, however, provides permittees substantial flexibility on how to comply with the terms of this permit, including options to customize requirements. In addition, compliance with TMDL-based requirements often have lengthy compliance schedules that allow	None

	the state and/or federal government cost shares infrastructure retrofits 50/50 even if they are exceeding final WLA, MALs or other numeric standards as part of the iterative process.		permittees to comply with a less costly phased approach.	
Fiscal Resources	Additional costs of monitoring are significant and we request this be noted here.	City of Santa Clarita	While the Board acknowledges that this permit will increase costs for monitoring, it is not appropriate to discuss costs within the Standard Provisions section of the permit. Further, Permittees can elect to participate in a CIMP or IMP for cost savings if desired.	None
Responsibilities of the Permittees	The requirement in Part VI.A.4.a.ii. is proscriptive as well as vague and is in violation of Water Code § 13360. Permittees will presumably wish to comply with the permit in an “efficient and cost-effective manner” but that standard is vague and ambiguous and should not be a source of separate liability imposed by the Board or a citizens’ suit plaintiff. There is also no support for this requirement in the CWA or the implementing regulations. This provision should be deleted.	County of Los Angeles	This is an existing requirement carried over from the 2001 MS4 permit.	None
Responsibilities of the Permittees	Part VI.A.4.a.iii. is not supported by the CWA or regulations, and is a violation of Water Code § 13360 as specifying a method of compliance. While permittees will need to cooperate with regard to many of the provisions of the draft Permit and will need to coordinate, these common sense steps should not be a separate requirement of the	County of Los Angeles	This is an existing requirement carried over from the 2001 MS4 permit. In addition, storm water management programs must include a comprehensive planning process that involves intergovernmental coordination to meet the requirements of the Clean Water Act. (40 C.F.R. § 122.26(d)(2)(iv).) In addition, permittees must have procedures to ensure effective coordination with other permittees. (<i>Id.</i> , § 122.26(d)(2)(vii).)	None

	Permit and should be deleted.			
Public Review	It is unclear why Part VI.A.5.a. is in the Permit, as the Board, as the custodian of the document, will have responsibility to comply with these statutes, not the Permittees. Since these statutes in any event are applicable to public documents, this provision is unnecessary and should be deleted.	County of Los Angeles	This is an existing requirement carried over from the 2001 MS4 permit. In any event, this provision just reinforces what is already required by the Board in providing access to public records.	None
Public Review	Please remove. Cities are already required to comply with the Freedom of Information Act and the Regional Board is not the enforcing agency.	City of Santa Clarita	This is an existing requirement carried over from the 2001 MS4 permit. In any event, this provision just reinforces what is already required by the Board in providing access to public records.	None
Public Review	This provision states, "All documents submitted to the Regional Water Board Executive Officer for approval shall be made available to the public for a 30-day period to allow for public comment." It is not clear whether the Regional Board or the permittee will be required to hold the 30-day public review of documents. Please clarify this language.	City of Malibu	The Public Review process is in reference to the Regional Board. Thus, after a permittee submits a document for approval, the Board will make the document available for a 30-day public comment period. In addition, this does not preclude the posting of documents by Permittees prior to or after submittal if the circumstances warranted.	None
Public Review	It is not practicable for all documents submitted to the Regional Board for approval to be first submitted to the public for a 30 day period. This would add a minimum of 30 days to all submittal schedules. There are far too many certifications and submittals in this order that could easily result in non-compliance.	City of Torrance	The Public Review process is in reference to the Regional Board. Thus, after a permittee submits a document for approval, the Board will make the document available for a 30-day public comment period. In addition, this does not preclude the posting of documents by Permittees prior to or after submittal if the circumstances warranted.	None

	Revise statement to read, “The Regional Board shall make all documents submitted to the Regional Board for approval available to the public for a 30 day period to allow for public comment.”			
Regional Water Board Review	Please add if the Executive Officer choses to go before the Board, permittees should not be responsible for implementing or complying with those sections of the permit affected until such time as the issue has been resolved.	City of Santa Clarita	During the pendency of any approval or review of any approval, Permittees must continue to implement any existing obligations until deemed otherwise.	None
Regional Water Board Review	It is imperative that this Permit add a condition providing that when a permittee submits a plan or program to the Regional Board for review to meet a condition of this Permit, the Regional Board shall notify an agency of approval, denial and reasons for denial, or provide a request for corrections for within 60 days, or else the plans shall be deemed automatically approved. This condition is not unusual and, in fact, is a standard process with the California State Department of Fish and Game for applicants submitting an application for a streambed alteration agreement. Failure of the Regional Board staff to provide responses and comments or approval after a permittee submits a mandatory plan or	City of Malibu	A document submitted shall only be approved upon actual approval by the Executive Officer or the Board, not through a mere lapse in time. Nevertheless, the Board understands that the time between submittal and approval can cause permittees’ uncertainty. The Board will make every effort to make determinations on submittals (approve, deny, or request revisions) as expeditiously as possible.	None

	report leaves the permittee in a state of uncertainty as to how it should proceed under its permit obligations.			
Reopener and Modification	Part VI.A.7.a. of the Order and Part VI.E.4. of the Fact Sheet must include a reference to the requirements of California law, including the Water Code and the Administrative Procedure Act applicable to adjudicative hearings.	County of Los Angeles	The reopener and modification provisions are consistent with federal regulations governing the Board's authority to modify, revoke, reissue, or terminate NPDES permits. If and when the Board exercises this authority, the Board will comply with any necessary and applicable state laws and regulations in conducting its hearings. It should be noted that in some cases, e.g. for a minor modification, the Board would not be required to conduct an adjudicative hearing.	None
Reopener and Modification	"USEPA guidance concerning regulated activities" should be deleted from Part VI.A.7.a.vi. as such "legislative guidance" has no regulatory significance unless incorporated through formal rulemaking.	County of Los Angeles	This provision is appropriate. While USEPA guidance is just that, guidance, and is thus not binding on the Board, such guidance may present or reveal new information that would warrant modifications to the permit. If and when the Board desires to make a change based on USEPA guidance, permittees would have the opportunity to make objections at that time.	None
Reopener and Modification	Part VI.A.7.d. of the Order and Part VI.E.4 of the Fact Sheet should be revised to allow for an additional modification, the changing of an interim compliance date.	County of Los Angeles	This is an existing requirement carried over from the 2001 MS4 permit. However, if warranted, the Board could change an interim compliance date utilizing provision VI.A.7.a.iv.	None
Part VI.A.8.	What does this comment mean? Where are the discharge points described in this order? Omit this section	City of Torrance	Discharge points described in this Order are MS4 outfalls. No other discharge points are appropriate in this Order.	None
Parts VI.A.11 and VI.A.12	These provisions are not relevant to the Permit and should be deleted. The provisions of Part	County of Los Angeles	These provisions are routinely required in NPDES permits issued by the Board. These provisions are also appropriate as discharges of waste resulting from the	None

	<p>VI.C of the Permit relating to public agency activities adequately cover the releases noted in Parts VI.A.11 and VI.A.12. Moreover, these provisions are vague and ambiguous, and do not address discharges to the MS4, which is the CWA requirement applicable to the Permittees.</p>		<p>combustion of toxic or hazardous waste and oily material should not be discharged from the MS4 to receiving waters. Unless covered by the exemption for emergency fire-fighting activities, such discharges are not authorized in this Order.</p>	
Part VI.A.11.	<p>Permittees may not have the knowledge or means to prevent the discharge of any waste resulting from the combustion of toxic or hazardous wastes resulting from a building fire or through aerial deposition. Hazardous Waste incinerators should be required to obtain an Industrial Discharge Permit. Omit this section</p>	City of Torrance	<p>This provision is routinely required in NPDES permits issued by the Board. The provision is also appropriate as discharges of waste resulting from the combustion of toxic or hazardous waste should not be discharged from the MS4 to receiving waters. Unless covered by the exemption for emergency fire-fighting activities, such discharges are not authorized in this Order.</p>	None
Part VI.A.12. & 13	<p>These comments refer to Corporation Yards that are required to have an Industrial Discharge Permit. Move to VI.D.8</p>	City of Torrance	<p>These provisions are routinely required in NPDES permits issued by the Board. These provisions are also appropriate as discharges of waste resulting from the combustion of toxic or hazardous waste and toxic or hazardous materials should not be discharged from the MS4 to receiving waters. Unless covered by the exemption for emergency fire-fighting activities, such discharges are not authorized in this Order. The language is also appropriate if a municipality has a yard that does not require General Industrial Permit coverage</p>	None
Enforcement	<p>The definition here of “effluent limitation” is different than the definition in Attachment A which draws on 40 CFR 122.2. Define effluent limitation only in Attachment A consistent with federal regulations</p>	City of Torrance; Peninsula Cities; South Bay Cities	<p>The definition of effluent limitation in this provision is consistent with the definition of effluent limitation in California Water Code section 13385.1, as it pertains to the imposition of mandatory minimum penalties. As this provision is discussing enforcement under state law, it is appropriate to provide the definition of effluent limitation in that state law for clarity. As noted in this</p>	None

			provision, the definition provided is for the purposes sections 13385.1 and 13385, subdivisions (h)(i), and (j). For all other purposes in this Order, the definition of effluent limitation in Attachment A is controlling.	
Enforcement	The definition of “effluent limitation” on its face appears to be problematic. Does use of this definition preclude a WQBEL (especially a narrative or non-numeric WQBEL) or BMP-based compliance? Please clarify how this term is being used and why “for these purposes” it does not include a receiving water limitation, a compliance schedule or a best management practice.	City of Malibu	The definition of effluent limitation in this provision is consistent with the definition of effluent limitation in California Water Code section 13385.1, as it pertains to the imposition of mandatory minimum penalties. As noted in this provision, the definition provided is for the purposes sections 13385.1 and 13385, subdivisions (h)(i), and (j). For all other purposes in this Order, the definition of effluent limitation in Attachment A is controlling.	None
Enforcement	Enforcement should include a provision that a permittee is not subject to the MMP and CWC fines if it is actively implementing an adaptive management/iterative approach through watershed management program and integrated monitoring plan. Please include the four step approach in the enforcement section	City of Santa Clarita	This comment is adequately discussed in other parts of the permit, including Parts VI.C. and VI.E.	None
Enforcement for Trash TMDLs	Trash TMDL should not be in enforcement section. Please delete and place in TMDL section only	City of Santa Clarita	The language is carried over from the 2001 MS4 permit, which was added in 2009 when the Board reopen the permit to incorporate provisions to implement the LA River Trash TMDL. Because trash is different from other pollutants, a discussion of enforcement of trash was provided in the 2001 permit. It is appropriate to carry over these provisions for clarity.	None
Enforcement for Trash TMDLs	Part VI.A.14.h. is not consistent with the language included in the adopted trash TMDLs, which allows for installation of full	County of Los Angeles	Compliance with the trash TMDLs through the use of a full capture compliance strategy is adequately addressed in Part VI.E.5.b. of the Order.	None

	<p>capture devices as a compliance method. For consistency, the Board should include or at minimum, reference, language describing the various compliance methods per the approved trash TMDLs.</p> <p>Recommend adding a new subparagraph iii stating: “iii. Subparagraphs i. ii. do not apply to Permittees who have installed approved, full capture systems throughout their jurisdictional area covered by the Trash TMDLs.”</p>			
<p>Enforcement for Trash TMDLs</p>	<p>VI.A.14.h. This section states, “With respect to the final effluent limitation of zero trash, any detectable discharge of trash necessarily is a serious violation...” This implies that regardless of installation of full capture systems, any detectable trash is a violation of the final effluent limitation. Clearly state in VI.A.14.h. that “except where a Permittee has complies with the installation of full capture systems...”</p>	<p>City of Torrance</p>	<p>Compliance with the trash TMDLs through the use of a full capture compliance strategy is adequately addressed in Part VI.E.5.b. of the Order.</p>	<p>None</p>
<p>Enforcement for Trash TMDLs</p>	<p>Please clarify how this provision with respect to enforcement will apply in instances where a permittee has complied with a final trash TMDL via installation of certified full capture devices which are not designed to control a storm event of greater than the</p>	<p>City of Torrance; South Bay Cities</p>	<p>Compliance with the trash TMDLs is adequately addressed in Part VI.E.5.b. of the Order.</p> <p>For the Trash TMDL the 1-year, 1-hour storm size was found to be sufficient to achieve the WLA.</p>	<p>None</p>

	1-year, 1-hour storm			
Attachment A - Definitions				
Add Definition	Add the definition of “outfall” in 40 CFR §122.26(b)(9)	County of Los Angeles	The definition of “outfall” has been added to Attachment A.	Definition added.
Add Definitions	There are various terms used throughout the documents that are unclear or vague and need to be clearly defined. Include definitions for terms used throughout the Permit.	County of Los Angeles	The commenter does not identify which terms it believes are unclear or vague. Without such information, the Board cannot respond to this comment.	None
Acronyms and Abbreviations	Revise list to show the following: ROWD; CERCLA; O&M; MEP; CIMP; IMP; WMPP; EIA; ESAs; TMRP; and PMRP.	County of Los Angeles	It is not necessary to define acronyms already defined in statute but the Board has included definitions for acronyms unique to this Order.	Language revised.
Definitions	The Maximum Extent Practicable (MEP) definition needs to be revised to reflect is updated definition found in the draft Phase II MS4 permit and in the draft Caltrans MS4 permit.	Cities of Baldwin Park, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, San Gabriel West Covina, and Vernon	The MEP definition currently in Attachment A is appropriate. If the State Board adopts precedential language, the Board may incorporate it.	None
Definition	Remove Maximum Extent Practicable from the definition attachment and rely instead for an understanding of the term on the discussion in the Fact Sheet on pages F-30 to F-31 which references State Board and USEPA interpretation	City of Torrance; South Bay Cities; Peninsula Cities;	It is appropriate to include a definition of MEP in Attachment A and provide a discussion in the Fact Sheet.	None
Definitions	Attachment A: Please provide definitions for: Construction Activity, Industrial Parks and Commercial Strip malls, Trash excluders, AMAL and MDAL (page G-13)	Cities of Downey, Monterey Park, Norwalk	Definitions were added to Attachment A.	Definitions added.
Definitions	Provide a definition of “residual	City of Malibu;	A definition for “residual water” has been included in the	Language

	water” in Attachment A	South Bay Cities	Order.	revised.
Definitions	BMPs – There is already a definition for BMPs in Attachment A, but it should be revised to specifically reference source control, including true source control. Adding true source control to the definition of BMPs would encourage Permittees to be mindful of it as they design their stormwater quality improvement programs	City of Signal Hill	The definition in the Order is inclusive of source control practices.	None
Definitions	Development – The definitions of Development, New Development, and Redevelopment should be clearly defined and added to the Definitions Section as they are in the existing MS4 permit, except that the 5,000 square foot threshold in the definition of redevelopment should be increased to at least 10,000 square feet	City of Signal Hill	The definitions were included in the revised Tentative. Several project categories have a 5,000 sq ft. threshold so the citing of 5,000 sq. ft. is appropriate.	Language revised.
Definitions	Environmentally Sensitive Areas (ESAs) – This term should be defined	City of Signal Hill	The definition was included in the revised Tentative.	Language revised.
Definitions	Green Infrastructure - This term should be defined. EPA states on the LID page of its website that green infrastructure “is a relatively new and flexible term” that “has been used differently in different contexts.” EPA also states, “Green infrastructure can be used at a wide range of landscape scales in place of, or in addition to, more traditional stormwater control elements to	City of Signal Hill	The term Green infrastructure is not used anywhere in the Order where it would need to be defined.	None

	support the principles of LID.”			
Definitions	Operational Source Control – This term needs to be clearly identified and utilized throughout the document to differentiate it from True Source Control	City of Signal Hill	Operational source control is used to distinguish from pollution prevention. These terms are used as defined in the Cal. Water Code.	None
Definitions	Predevelopment conditions – This term is used in Provision VI.D.6.c.v(1)(c)(ii)2 and could be viewed in an overly broad manner unless it is clearly defined in the definition section	City of Signal Hill	Defining predevelopment could be restrictive in allowing Permittees to comply with New/Redevelopment requirements.	None
Definitions	Stormwater harvest and use – Since it may be desirable in the course of implementing TMDLs to harvest stormwater from an existing built-up area to infiltrate or use for irrigation, this term should be defined	City of Signal Hill	Rainfall Harvest and Use is defined and addresses the commenters concern as it is defined in the revised Tentative.	Language revised.
Definitions	True Source Control – This term needs to be defined. Staff could use the definition from CASQA’s True Source Control Initiative.	City of Signal Hill	The term True Source Control is not used anywhere in the Order where it would need to be defined.	None
Definitions	Infiltration definition should be revised to be entitled Infiltration BMP	City of Torrance	The Board agrees and has revised the definition accordingly.	Language revised.
Definitions	Revise the definition of “Rainfall Harvest and Use” to avoid describing the source of the runoff, but simply use the term “rainfall runoff” and leave to the discretion of the Permittees to determine what sources of runoff can be beneficially used for irrigation and non-potable uses	City of Torrance; Peninsula Cities; South Bay Cities	The definition has been revised to allow capture throughout a site.	Language revised.
Definitions	HUC 12 Boundaries should be used as guidance. Provide a definition of HUC 12 boundaries	City of Torrance	The language is appropriate as is, and the Order allows Permittees to go beyond the HUC 12 boundary with approval.	None

	as “watershed boundaries that most closely align with HUC 12 boundaries”			
Definitions	ACWA is somewhat concerned that the wording of these provisions is somewhat difficult to follow. It is often difficult to discern which BMPs are required for both the essential CENSWDs and other types. ACWA believes that it would helpful to all parties if the permit more clearly delineated these two groups of CENSWDs. The permit should explicitly title the two groups, Essential CENSWD (including discharges from CWSs) and Non-Essential CENSWD, and have all BMPs and other requirements explicitly associated with each group.	ACWA	The section is appropriate as is. The Order is written for municipalities who don’t separate the discharges into essential and non-essential categories.	None
Definition	On Page 29 of the Tentative Permit there is a provision that CENSWDs need to obtain “local permits.” We would like clarification on the definition of “local permits” in this sentence. Further, the requirement for the CENSWD to obtain a “local permit” is conditional upon the MS4 Permittee already requiring such a permit. We understand this to mean that if the local MS4 Permittee does not already require CENSWDs to get a local permit, the MS4 does not require one be obtained. This seems unnecessary; if local authority	ACWA	The Order states “obtain any local permits required by the MS4 Owners/Operators.” The local Permit is in reference to the MS4 Owner/Operator accepting the discharge. The Order language already denotes the requirement is conditional upon their operator requiring one.	None

	already requires a permit, the MS4 does not also have to require it.			
Definition	In Attachment A, acronyms IMP, CIMP, CMP, and SQMP are not included. Please include these acronyms in the list.	Dept. Water & Power, City of Los Angeles	The Board agrees and has included the definitions where necessary.	Language revised.
Definition	Definition of “infiltration” is not a description of the process of infiltration but rather a description of best management practices that utilize the infiltration process. The term “infiltration” must be distinguished from “infiltration BMP.”. Infiltration definition should be revised to be entitled Infiltration BMP.	Peninsula Cities; South Bay Cities	The language was revised per commenter’s suggestion.	Language revised.
Footnotes	Important definitions should not be in footnotes, but should be included in Attachment A. Footnote 5 states that uncontaminated groundwater infiltration is distinguished from “inflow”, however the term “inflow” is not defined—typically it is used to refer to stormwater which infiltrates the sanitary sewer collection system, and if that is the reference this case it doesn’t really seem to be relevant. Delete footnote 5. Move definition of “groundwater infiltration” from footnote 5 to Definitions in Attachment A.	Peninsula Cities	The footnote is appropriate as it is referencing a definition contained in federal regulation that is very specifically related to Part III.A.	Language revised.

	Eliminate reference to “inflow” as it is not relevant in this situation.			
Definition	We would recommend that the definition of potable water include the term “raw water.” While untreated water is not a common discharge, it does occur and some MS4 permittees have expressed reservations about accepting this water unless it is explicitly stated in the permit.	ACWA; Main San Gabriel Basin Watermaster; Upper San Gabriel Valley Municipal Water District	The use of the term potable is consistent with Federal requirements. The Board recognizes that discharges of raw water from water supply sources may be essential and will clarify the language of the permit such that these discharges will also be considered conditionally exempt essential discharges.	Revisions will be made.
Definitions	Add definitions for potable water, potable water distribution systems, and raw water to Appendix A-Definitions.	MWD	A definition has been added for potable water distribution systems and one will be added for potable water.	Language revised.
Definitions	The changing of the Authorized Non-Stormwater Discharge definition appears to be arbitrary and capricious. Proposed Solution- Maintain the current definition of Authorized Discharge as identified on the current MS4 Permit	City of Vernon	The language is appropriate as-is. The commenter has not explained why it believes the definition is appropriate.	None
<i>Attachments B and C</i>				
Attachment B	The HUC boundaries do not match the watershed boundaries. This means that certain areas drain to different locations depending on whether you look at the HUC or Watershed boundary. The maps should be revised to match boundaries.	County of Los Angeles	The HUC denotations are used in the Order to delineate subwatersheds for various requirements. The Order contains sufficient flexibility to deal with areas where the watershed and HUC boundaries conflict.	None
Attachment B	There are eight HUC 12 boundary areas for the monitoring program in the Santa Clara River that affect the City, which makes	City of Santa Clarita	Additional flexibility has been incorporated in the Monitoring program to allow a more cost effective program.	Language revised.

	monitoring cost prohibitive; please allow for some HUC 12 areas to be eliminated if there is sufficiently similar land use			
Attachment B	<p>It is problematic that the Watershed Boundaries do not align with the HUC 12 Boundaries in many areas.</p> <p>Appears that the HUC 12 boundaries need to be revised, or else reference to the HUC 12 boundaries should be eliminated in favor of watershed boundaries.</p>	Peninsula Cities; South Bay Cities	The HUC 12 boundaries establish areas which guide where certain requirements must be implemented, in particular within the New and Redevelopment Section. They define sub-watersheds not watersheds. The Order for the New Development/Redevelopment Program, allows Permittees to go outside of the HUC 12 if it is not feasible to comply within the HUC 12.	None
Attachment C	<p>MS4 Map appears to be a misnomer. The “MS4” also includes municipal streets, curb and gutters, ditches, etc. However, the maps in Attachment C do not show these portions of the MS4. The maps also include Waters of the United States. The title of Attachment C should be revised : <u>Storm Drain MS4</u> Maps by Watershed Management Area</p>	County of Los Angeles	Comment noted. While the Maps do not capture the entire MS4, the storm drain system is a major part of the MS4 system and typically is the information used by Permittees and stakeholders.	None
<i>Attachment F – Fact Sheet</i>				
Introduction	<p>A number of permit provisions do not apply to various dischargers. The second paragraph in the introduction to the Fact Sheet should be revised as follows: “This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for dischargers in California.” Only those sections or subsections of this Order that are specifically</p>	LACFCD	The second paragraph has been revised as requested.	Fact Sheet revised.

	<p>identified as “not applicable” have been determined not to apply to the Dischargers covered by this Order. Sections or subsections of this Order not specifically identified as “not applicable” are fully applicable to the Dischargers.”</p>			
<p>MS4 in the County</p>	<p>Section II.A. and Table F-2: The Board should delete “controlled in large part by the Los Angeles County Flood Control District (LACFCD), among others...” in II.A. Since the MS4 is defined to include not only catch basins, storm drains and channels but also “roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains,” 40 CFR § 122.26(b)(8), the actual extent of the MS4 within the boundaries of the LACFCD is much greater than set forth in Table F-2. Table F-2 needs to be corrected as proposed to reflect the correct land area for the County, which does not include federal national forest lands or the land areas of incorporated cities.</p>	<p>County of Los Angeles</p>	<p>The Fact Sheet has been revised.</p>	<p>Table F-2 revised.</p>
<p>History of LACFCD</p>	<p>The first full paragraph on F-5, relating to the history of the LACFCD and the development of the MS4, contains numerous errors. The genesis of the LACFCD was serious flooding that occurred in 1914, prior to major development of the Los</p>	<p>LACFCD</p>	<p>The paragraph was revised as requested.</p>	<p>Paragraph revised.</p>

	Angeles County watersheds. LACFCD requests that the existing paragraph be replaced with proposed language.			
Facility Description	The current language, “The Los Angeles County Flood Control District boundaries encompass ...85 incorporated cities...and approximately 2.1 million land parcels” implies the LACFCD has jurisdiction or oversight. The LACFCD is merely a service area boundary. Revise to state: “The Los Angeles County Flood Control District boundaries <u>service area</u> ...”	LACFCD	Comment noted, but a “service area boundary” is appropriately labeled as a boundary.	None
LACFCD Facilities	The first and third full paragraphs on p. F-6 describe facilities owned or operated by the LACFCD. These facilities are very limited and occupy a tiny area of the entire urbanized watershed. Various large municipalities that are Permittees, such as the City of Los Angeles, operate extensive maintenance yards and facilities as well as numerous city-owned buildings that are more extensive than those operated by the LACFCD. There is no justification for the description of LACFCD facilities being included in the Fact Sheet, and these references should be deleted.	LACFCD	The first paragraph was revised and the third paragraph was deleted.	Paragraphs revised.
LACFCD Infrastructure	On F-6, part of the second full paragraph is erroneous. The MS4 is operated by multiple Permittees, including the LACFCD, and each	LACFCD	The second paragraph was revised as requested.	Paragraph revised.

	of these MS4s “receive storm water and non-storm water flows from various sources.” The MS4 includes the streets and gutters, so every Permittee’s MS4 receives such non-stormwater and stormwater flows. It is thus inaccurate to specify the role of that part of the MS4 operated by the LACFCD.			
LACFCD ROWD	The last sentence in the first paragraph on F-15 states that the “Regional Water Board also evaluated the LACFCD’s 2010 ROWD and found that it too did not satisfy federal requirements nor reflect the current status for MS4s.” The Board has not provided LACFCD with any written evaluation of the 2010 ROWD. Given this fact, this sentence should be deleted.	LACFCD	The statement is appropriate. The Board need not have provided LACFCD with a written evaluation to make this a true statement.	None
LA County MS4	In subparagraph i. on F-15 regarding the factors evaluated by the Board in evaluating the five ROWDs and the structure for the Permit, it is stated that the Los Angeles County MS4 is “controlled in large part by the Los Angeles County Flood Control District, among others . . .” This statement is incorrect and should be deleted.	LACFCD	Comment noted, but the Board has not been provided with any evidence to the contrary.	None
LACFCD Request to No Longer be Designated Principal	The statement on p. F-16 that LACFCD “requested that if the Regional Water Board does not issue an individual permit to the LACFCD, that it is no longer	LACFCD	The statement in the Fact Sheet has been revised.	Fact Sheet revised.

Permittee	designated as Principal Permittee and relieved of Principal Permittee responsibilities” is incorrect and should be deleted. LACFCD requested that it no longer be designated as Principal Permittee, but not in return for not being issued an individual permit.			
LACFCD as Primary Owner and Operator of LA MS4	On F-17, it is erroneous to term LACFCD as the “primary owner and operator” of the MS4 or that it is the “owner and operator of the majority of the Los Angeles MS4.” The MS4 is comprised of more than 30,000 miles of infrastructure, of which the LACFCD operates less than an estimated 10 percent.	LACFCD	References to LACFCD being the “primary owner and operator” have been deleted.	Finding revised.
LACFCD Not Principal Permittee	The tentative order cites the LACFCD’s lack of ownership or control over land from which most pollutants originate as the reason for relieving it of the Principal Permittee role. Although it is true that the LACFCD does not have land use authority, the reason it will no longer be the Principal Permittee because the request was made in the ROWD submitted November 2011.	LACFCD	The reference has been deleted.	Fact Sheet revised.
Findings	Finding I indicates that the Fact Sheet provides background and rationale for the permit requirements and incorporates the Fact Sheet into the Order as Attachment F, however many elements of the Fact Sheet rather than being explanatory of policy	City of Torrance; Peninsula Cities; South Bay Cities	The commenters have not provided examples of any perceived inconsistencies. The Fact Sheet can be updated, if necessary, if the permit is revised	None

	<p>or background restate or expand the implementation requirements in the permit and in some cases statements in the fact sheet are inconsistent or contradictory with the main body of the permit.</p> <p>Eliminate inconsistencies between Attachment F and main body of permit by eliminating duplicative elements from Fact Sheet. This will eliminate the need to update the Fact Sheet as revisions are made to the Permit.</p>			
Permit Layout	<p>Timeline for Implementation of Permit Requirements is a helpful synopsis of all the deadlines in the permit. This table should be incorporated into the body of the permit rather than in the Fact Sheet as a helpful reference for permittees.</p> <p>Move Table F-5 into main body of permit as it is a vital reference for implementation of permit requirements. Make sure that timelines in Table F-5 are consistent with statements made in the permit.</p>	<p>Peninsula Cities; City of Torrance; South Bay Cities</p>	<p>Moving Table F-5 into the main body of the permit is unnecessary. The Fact Sheet is already a part of the permit.</p>	<p>None</p>
General Legal Comments				
General	<p>There is no factual support for the Board’s finding that “the requirements in this Permit are not more stringent than the minimum federal requirements.” There are numerous requirements that exceed “the minimum federal</p>	<p>County of Los Angeles</p>	<p>The requirements of the permit are not more stringent than the minimum federal requirements. Section 402(p)(3)(B)(iii) of the Clean Water Act requires the Regional Water Board to impose permit conditions, including: “management practices, control techniques and system, design and engineering methods, and <i>such other provisions as the Administrator of the State</i></p>	<p>None</p>

	<p>requirements.” For example, the Board may include “other provisions” in an MS4 permit, but they are placed there at the complete discretion of the Board, not as a result of any requirement in the CWA.</p>		<p><i>determines appropriate for the control of such pollutants.”</i> (emphasis added.) Section 402(a)(1) of the Clean Water Act also requires states to issue permits with conditions necessary to carry out the provisions of the Clean Water Act. The federal regulations pertaining to NPDES permit in general, as well as large and medium MS4s, also mandate certain requirements. In issuing MS4 permits, “[t]he permitting agency has discretion to decide what practices, techniques, methods and other provisions are appropriate and necessary to control the discharge of pollutants.” (<i>City of Rancho Cucamonga v. Regional Water Quality Control Bd.- Santa Ana Region</i> (2006) 135 Cal.App.4th 1377, 1389.) However, the “Regional Board must comply with federal law requiring detailed conditions for NPDES permits.” (<i>Ibid.</i>) Further, USEPA expects the permitting authority to develop the specific practices that comply with the Clean Water Act on a permit-by-permit basis. (<i>NRDC v. USEPA</i> (9th Cir. 1992) 966 F.2d 1292, 1308.) To the extent the Board is exercising discretion in including “such other provisions” the Board deems appropriate to control pollutants, the Board is exercising discretion required and/or authorized by federal law, not state law. (See, <i>City of Rancho Cucamonga v. Regional Water Quality Control Bd.-Santa Ana Region</i> (2006) 135 Cal.App.4th 1377, 1389; <i>Building Industry Ass’n of San Diego County v. State Water Resources Control Bd.</i> (2004) 124 Cal.App.4th 866, 882-883.)</p>	
<p>Tenth Amendment</p>	<p>The permit imposes land use regulations, dictates specific methods of compliance, and/or requires a municipal permittee to modify city ordinances in a specific manner. This improperly intrudes upon the Cities’ land use authority in violation of the Tenth Amendment of the U.S. Constitution. Constitutionally conferred land use powers cannot</p>	<p>Cities of Agoura Hills, Artesia, Beverly Hills, Hidden Hills, La Mirada, Monrovia, Norwalk, Rancho Palos Verdes, San Marino, South El Monte, and Westlake Village</p>	<p>The permit does not impose land use regulations, nor does it restrict or control local land-use decision-making authority. Rather, the permit requires the permittees to fulfill Clean Water Act requirements and protect water quality in their land use decisions. The requirements in the permit allow for flexibility in compliance options to the extent allowable under the Clean Water Act. The substantive regulatory requirements of the Clean Water Act are a valid exercise of the federal government’s enumerated powers and authority over navigable waters. (<i>NRDC v. USEPA</i> (9th Cir. 1998) 863 F.2d 1420, 1436.)</p>	<p>None</p>

	<p>be overridden by State or federal statutes. Rather than adopting programs that dictate the precise method of compliance, the Board should collaborate with the Cities and other permittees to develop a range of model programs that each municipality could then modify and adopt according to its own individual circumstances.</p>		<p>Environmental regulation is not land use regulation, and therefore does not infringe upon local authority over land use decisions. (<i>California Coastal Commission v. Granite Rock</i> (1987) 480 U.S. 572; see also <i>In re Los Angeles County Municipal Storm Water Permit Litigation</i> (Sup. Ct. Los Angeles County, March 24, 2005, Case No. BS 080548), Statement of Decision from Phase I Trial on Petitions for Writ of Mandate, pp. 13-16.)</p> <p>In addition, local land use planning must be consistent with general statewide laws. (<i>County of Los Angeles v. California State Water Resources Control Board</i> (2006) 143 Cal.App.4th 985, 1003.) Article 11, section 7, of the California Constitution states that a county or city may not enact laws that conflict with general laws. The Porter-Cologne Water Quality Control Act contains the California Legislature’s finding that water quality is a matter of state-wide concern, requiring a statewide program administered at a regional level. (See, e.g., Wat. Code, § 13000; see also generally <i>Southern California Edison v. State Water Resources Control Board</i> (1981) 116 Cal.App.3d 751, 758.) Section 101 of the CWA has a companion policy statement, where Congress found that water quality is a matter of federal concern.</p> <p>The permit also does not dictate specific methods of compliance or dictate the manner in which the permittees use their land. Where the permit includes detailed requirements, it is to comply with the Clean Water Act and its regulations. USEPA’s regulations mandate that certain requirements be included in MS4 permits in order to achieve the requirements of the Clean Water Act. Thus, federal law mandates that permits issued for MS4s require certain actions that will result in the elimination or reduction of pollutants to receiving waters and the state is required, by federal law, to select the controls necessary to meet this standard. (See <i>NRDC v. USEPA</i> (9th Cir. 1992) 966 F .2d 1292, 1308; <i>City of Rancho</i></p>	
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			<p><i>Cucamonga v. Regional Water Quality Control Bd., Santa Ana Region</i> (2006) 135 Cal.App.4th 1377, 1389-90.)</p> <p>In issuing the permit, the Board is acting as part of a joint state and federal process to enforce the Clean Water Act. The Clean Water Act requires states either to administer a federally-directed regulatory program or allow the federal authorities to administer the program. In 1972, the California Legislature amended the Porter-Cologne Act to implement the Clean Water Act and assume administrative responsibility for the issuance of NPDES permits such as this permit. Cooperative federalism is a valid means for Congress to implement its enumerated authorities in compliance with the Tenth Amendment of the United States Constitution. By providing the states a choice, “there can be no suggestion that the Act commandeers the legislative processes of the States by directly compelling them to enact and enforce a federal regulatory program.” (<i>Hodel v. Virginia Surface Min. and Reclamation Ass’n</i> (1981) 452 U.S. 264, 288.) Rather, the States, “within limits established by federal minimum standards, [] enact and administer their own regulatory programs, structured to meet their own particular needs.” (<i>Hodel</i>, 452 U.S. at 289.)</p>	
<p>Water Code section 13360</p>	<p>The detailed prescriptive requirements of the draft permit violate Water Code § 13360. The Board should delete all specific activities and all provisions of the draft permit that specify the design, location, type of construction, or particular manner required to comply with obligations of the draft Permit. Alternatively, the Board should include a provision that states, “No Permittee is required to comply with any provision of this</p>	<p>County of Los Angeles</p>	<p>The commenter’s reliance on Water Code section 13360 is misplaced. That section involves enforcement and implementation of state water quality law, not compliance with the federal Clean Water Act. The federal law preempts the state law. (<i>City of Burbank v. State Water Resources Control Bd.</i> (2005) 35 Cal.4th 613, 626.) The specific programs required by the Clean Water Act must take precedence over any statutes within the Water Code. Water Code section 13360 is not part of the Porter-Cologne Water Quality Control Act’s Chapter 5.5, which authorizes issuance of permits under the Clean Water Act. Chapter 5.5 takes precedence over any conflicting statutes found elsewhere in the Water Code. Water Code section 13372 reads, in part: “The</p>	<p>None</p>

	<p>Order that specifies the design, location, type of construction, or particular manner required to comply with the obligations of this Order, which are included as suggestions only.”</p>		<p>provisions of this chapter shall prevail over other provisions of this division to the extent of any inconsistency.” If the commenter is suggesting that Water Code section 13360 prohibits programs necessary to comply with the federal requirements, then as a matter of statutory construction and preemption, federal requirements must take precedence over Water Code section 13360. (See <i>In re Los Angeles County Municipal Storm Water Permit Litigation</i> (Sup. Ct. Los Angeles County, March 24, 2005, Case No. BS 080548), Statement of Decision from Phase II Trial on Petitions for Writ of Mandate, pp. 24-29.)</p> <p>MS4 permits issued by the Regional Water Board must ensure compliance with the Clean Water Act. (Wat. Code, §§ 13370(c), 13372(a), 13377.) Federal law mandates that permits issued for MS4s require certain actions that will result in the elimination or reduction of pollutants to receiving waters and the state is required, by federal law, to select the controls necessary to meet this standard. (See <i>NRDC v. USEPA</i> (9th Cir. 1992) 966 F.2d 1292, 1308; <i>City of Rancho Cucamonga v. Regional Water Quality Control Bd., Santa Ana Region</i> (2006) 135 Cal.App.4th 1377, 1389-90.) In creating a permit system for dischargers from MS4s, Congress intended to implement actual programs. (<i>Natural Resources Defense Council, Inc. v. Costle</i> (D.C.Cir.1977) 568 F.2d 1369, 1375.) Section 402(p)(3)(B)(iii) of the Clean Water Act authorizes the imposition of permit conditions, including: “management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator of the State determines appropriate for the control of such pollutants.” Section 402(a)(1) of the Clean Water Act also authorizes states to issue permits with conditions necessary to carry out its provisions. The Regional Water Board, as the permitting agency, thus has discretion to decide what practices, techniques, methods and other provisions are appropriate</p>	
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			<p>and necessary to control the discharge of pollutants.</p> <p>Even if Water Code section 13360 applies, the permit does not violate the statute. The permit does not set forth a specific method of compliance or “fix” on permittees, but rather sets forth limitations, standards, guidelines, and/or goals to be achieved or attained in order to meet the requirements of the Clean Water Act. Such limitations and standards does not equate to specifying the manner of compliance. (See, e.g., <i>Tahoe-Sierra Preservation Council v. State Water Resources Control Bd.</i> (1989) 210 Cal.App.3d 1421, 1438.) Furthermore, the permit affords the permittees discretion and flexibility in how to meet the requirements of the permit. Throughout the permit, the permittees are granted considerable autonomy and responsibility in the development and implementation of programs to control the discharge of pollutants. For example, it is the permittees who design programs for compliance, such as implementing BMPs selected by the permittees and approved by the Board.</p>	
<p>Agency and Public Oversight</p>	<p>The permit fails to provide for meaningful agency and/or public review and comment on several programs that would be developed by the Permittees, including Parts VI.C.1.b., VI.C.3.b.iv.(5)(b), VI.C.3.c., VI.D.1.a., and VI.E.2.d.i. This violates the requirement that “stormwater management programs that are designed by regulated parties must, in every instance, be subject to meaningful review by an appropriate regulating entity. . . .” (<i>Environmental Defense Center v. USEPA</i> (9th Cir. 2003) 344 F.3d 832, 854-56. These provisions must be removed, or must be</p>	<p>Environmental Groups</p>	<p>The tentative permit includes adequate public participation processes. Part VI.A.5.b. of the tentative permit includes an opportunity for public review and comment on submittals that would be approved by the Executive Officer. For those submittals, the permit includes criteria for the Executive Officer to use in evaluating the submittals. Part VI.A.6. also provides a process whereby a permittee or a member of the public may request Board review of any formal determination or approval by the Executive Officer.</p> <p>The case cited by the commenter – <i>Environmental Defense Center v. USEPA</i> – is not directly relevant to the permit at issue. That case involved a challenge to USEPA regulations regarding Phase II MS4 permits. The court in that case determined that the USEPA rule did not provide for USEPA or public review of the minimum control measures. This permit is a Phase I</p>	<p>None</p>

	<p>substantially re-written to provide for meaningful review and public process or they threaten to invalidate the entire MS4 permit.</p>		<p>MS4 permit, not a regulation. This permit, including the minimum control measures, has been subject to extensive public notice and Regional Board review. While the permit proposes to allow some specific submittals to be approved by the Executive Officer, the permit provides for public review and comment on such submittals.</p>	
<p>California Water Code section 13241</p>				
<p>Economic Considerations</p>	<p>The Board failed to adequately consider economic impacts of the permit as required by Water Code sections 13000 and 13241. Because the Permit requires new and higher levels of service in numerous key regards, consideration of economic factors is necessary.</p>	<p>Cities of Agoura Hills, Artesia, Beverly Hills, Hidden Hills, La Mirada, Monrovia, Norwalk, Rancho Palos Verdes, San Marino, South El Monte, and Westlake Village</p>	<p>Water Code section 13000 does not require the Board to consider economic impacts of the permit. The Board has no affirmative duty to consider the statements of legislative intent found in section 13000 in adopting MS4 permits and incorporating TMDL requirements into it. (<i>City of Arcadia v. State Water Resources Control Board</i> (2011) 191 Cal.App.4th 156, 176.) A statute containing “a general statement of legislative intent...does not impose any affirmative duty that would be enforceable...” (<i>Shamsian v. Department of Conservation</i> (2006) 136 Cal.App.4th 621, 640-641; see also <i>Common Cause v. Board of Supervisors</i> (1989) 49 Cal.3d 432, 444 [“the precatory declaration of intent expressed in the statute must be read in context” and “cannot be viewed as independently creating substantive duties...in addition to those imposed by the regulation”].)</p> <p>Water Code section 13241 requires the Regional Water Board to consider certain factors, including economic considerations, in the adoption of water quality objectives. Water Code section 13263 requires the Board to take into consideration the provisions of section 13241 in adopting waste discharge requirements. In <i>City of Burbank v. State Water Resources Control Board</i> (2005) 35 Cal.4th 613, the California Supreme Court considered whether regional water boards must comply with section 13241 when issuing waste discharge requirements under section 13263(a) by taking into account the</p>	<p>Further clarification added to Fact Sheet.</p>

		<p>costs a permittee will incur in complying with the permit requirements. The Court concluded that whether it is necessary to consider such cost information “depends on whether those restrictions meet or exceed the requirements of the federal Clean Water Act.” (<i>Id.</i> at p. 627.) The Court ruled that regional water boards may not consider the factors in section 13241, including economics, to justify imposing pollutant restrictions that are less stringent than the applicable federal law requires. (<i>Id.</i> at p. 626-627 [“[Water Code s]ection 13377 specifies that [] discharge permits issued by California’s regional boards must meet the federal standards set by federal law. In effect, section 13377 forbids a regional board’s consideration of any economic hardship on the part of the permit holder if doing so would result in the dilution of the requirements set by Congress in the Clean Water Act. . . . Because section 13263 cannot authorize what federal law forbids, it cannot authorize a regional board, when issuing a [] discharge permit, to use compliance costs to justify pollutant restrictions that do not comply with federal clean water standards”].) While the <i>Burbank</i> decision does require an analysis of the factors in section 13241, including costs, when the Regional Water Board adopts permit conditions that are more stringent than federal law, this permit does not impose requirements that are more stringent than federal law. Therefore, consideration of the factors set forth in section 13241 is not required for permit requirements that implement the effective prohibition on the non-storm water discharges, or for controls to reduce the discharge of pollutants in storm water to the maximum extent practicable, or other provisions that the Board has determined appropriate to control such pollutants, as those requirements are mandated by federal law.</p> <p>Although the Board is not required to consider the factors set forth in section 13241 in issuing the permit,</p>	
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			<p>the Board has nevertheless done so. See Part XIV of the Fact Sheet.</p> <p>Based on the consideration of costs, the Board has provided permittees a significant amount of flexibility to choose how to implement the permit. The permit provides permittees the flexibility to address critical water quality priorities, namely discharges to waters subject to TMDLs, but aims to do so in a focused and cost-effective manner while maintaining the level of water quality protection mandated by the Clean Water Act and other applicable requirements. For example, the inclusion of a watershed management program option allows permittees to submit a plan, either individually or in collaboration with other permittees, for Board approval that would allow actions to be prioritized based on specific watershed needs. The permit also allows permittees to customize monitoring requirements, which they may do individually or in collaboration with other permittees. In the end, it is up to the permittees to determine the effective BMPs and measures needed to comply with the permit. Permittees can choose to implement the least expensive measures that are effective in meeting the requirements of the permit. The permit also does not require permittees to fully implement all requirements within a single permit term. Where appropriate, the Board has provided permittees with additional time outside of the permit term to implement control measures to achieve final WQBELs and/or water quality standards. Lastly, the permit includes several reopener provisions whereby the Board can modify the permit based on new information gleaned during the term of the permit.</p> <p>In addition, there is an element of cost consideration inherent in the maximum extent practicable (MEP) standard. While the term “maximum extent practicable” is not specifically defined in the Clean</p>	
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			<p>Water Act or its implementing regulations, USEPA, courts, and the State Water Board have addressed what constitutes MEP. MEP is not a one-size fits all approach. Rather, MEP is an evolving, flexible, and advancing concept, which considers practicability. This includes technical and economic practicability. Compliance with the MEP standard involves applying BMPs that are effective in reducing or eliminating the discharge of pollutants in storm water to receiving waters. BMP development is a dynamic process, and the menu of BMPs may require changes over time as experience is gained and/or the state of the science and art progresses. MEP is the cumulative effect of implementing, evaluating, and making corresponding changes to a variety of technically appropriate and economically practicable BMPs, ensuring that the most appropriate controls are implemented in the most effective manner. The State Water Board has held that “MEP requires permittees to choose effective BMPs, and to reject applicable BMPs only where other effective BMPs will serve the same purpose, the BMPs would not be technically feasible, or the costs would be prohibitive.” (State Water Board Order WQ 2000-11.)</p> <p>In addition, there are instances outside of this permit where the Board previously considered economics. First, when the Board adopted the water quality objectives that serve as the basis for several requirements in the permit, it took economic considerations into account. (See <i>In re Los Angeles County Municipal Storm Water Permit Litigation</i> (Sup. Ct. Los Angeles County, March 24, 2005, Case No. BS 080548), Statement of Decision from Phase II Trial on Petitions for Writ of Mandate, p. 21.) Second, the cost of complying with TMDL wasteload allocations was previously considered during the adoption of each TMDL. Thus, the costs of complying with the water quality based effluent limitations and</p>	
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			<p>receiving water limitations derived from the 33 TMDLs should not be added to determine the cost of compliance with all TMDLs. Further, the Board’s considerations of economics in developing each TMDL have often resulted in lengthy implementation schedules to achieve water quality standards. Where appropriate, these implementation schedules have been used to justify compliance schedules in the permit.</p> <p>Lastly, it should be noted that where statutes require “consideration” of economics, the requirement is just that: a consideration. Water Code section 13241 does not require a “cost-benefit analysis” or dictate any course of action upon consideration. Economics is merely a factor to be considered. (See <i>In re Los Angeles County Municipal Storm Water Permit Litigation</i> (Sup. Ct. Los Angeles County, March 24, 2005, Case No. BS 080548), Statement of Decision from Phase II Trial on Petitions for Writ of Mandate, p. 22.)</p>	
<p>California Water Code section 13241</p>	<p>The Board needs to clarify whether the permit requirements set forth in the final permit will be imposed because they are (i) themselves precisely mandated by federal law, or (ii) instead as an exercise of the Board’s discretion. Unless the Board can point to any specific federal limitations that compel it to impose its chosen permit requirements, the Board must comply with the Porter-Cologne Act’s requirements for exercising its discretion.</p>	<p>BILD</p>	<p>The Board has already indicated that the permit requirements are not more stringent than the minimum federal requirements. Section 402(p)(3)(B) of the Clean Water Act requires the Board to include permit requirements that implement the effective prohibition on the non-storm water discharges, and to require controls to reduce the discharge of pollutants in storm water to the maximum extent practicable, and other provisions that the Board has determined appropriate to control such pollutants. Section 402(a)(1) of the Clean Water Act also requires states to issue permits with conditions necessary to carry out the provisions of the Clean Water Act. The federal regulations pertaining to NPDES permit in general, as well as large and medium MS4s, also mandate certain requirements. In issuing MS4 permits, “[t]he permitting agency has discretion to decide what practices, techniques, methods and other provisions</p>	<p>None</p>

			<p>are appropriate and necessary to control the discharge of pollutants.” (City of Rancho Cucamonga v. Regional Water Quality Control Bd.-Santa Ana Region (2006) 135 Cal.App.4th 1377, 1389.) However, the “Regional Board must comply with federal law requiring detailed conditions for NPDES permits.” (Ibid.) Further, USEPA expects the permitting authority to develop the specific practices that comply with the Clean Water Act on a permit-by-permit basis. (NRDC v. USEPA (9th Cir. 1992) 966 F.2d 1292, 1308.) To the extent the Board is exercising discretion in including certain permit requirements, the Board is exercising discretion required and/or authorized by federal law, not state law.</p>	
<p>California Water Code section 13241</p>	<p>The Board cannot reasonably maintain that federal law compels the Board to impose numeric effluent limits. The Board is exercising its own discretion by imposing WQBELs in MS4 permits, which exceeds the MEP congressional mandate. Therefore, the Board’s election to promulgate such WQBELs would be subject to the consideration of Section 13241 factors. Here, the Draft Permit would impose many new and onerous requirements upon the permittees and their constituents, but it reflects no effort by the Board’s staff to marshal evidence necessary to consider and reconcile the six balancing factors that are specifically prescribed by California Water Code § 13241.</p>	<p>BILD</p>	<p>The Board is not asserting that federal law specifically requires the Board to impose numeric limits. Section 402(p)(3)(B)(iii) of the Clean Water Act requires the Regional Water Board to impose “controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the [Regional Water Board] determines appropriate for the control of such pollutants.” Section 402(a)(1) of the Clean Water Act also requires states to issue permits with conditions necessary to carry out the provisions of the Clean Water Act. In issuing MS4 permits, “[t]he permitting agency has discretion to decide what practices, techniques, methods and other provisions are appropriate and necessary to control the discharge of pollutants.” (City of Rancho Cucamonga v. Regional Water Quality Control Bd.-Santa Ana Region (2006) 135 Cal.App.4th 1377, 1389.) Federal law authorizes both narrative and numeric effluent limitations to meet state water quality standards. Federal law thus authorizes the Board to impose numeric limits and the Board has determined that numeric limits are appropriate to control pollutants</p>	<p>None</p>

			<p>subject to a TMDL. To the extent the Board is exercising discretion in establishing numeric limits, the Board is exercising discretion required and/or authorized by federal law, not state law.</p> <p>Although the Board is not required to consider the factors set forth in section 13241 in establishing numeric limits, the Board has nevertheless done so. See Part XIV of the Fact Sheet.</p>	
<p>California Water Code section 13241</p>	<p>The Board cannot reasonably maintain that federal law precludes the Board’s application of the California Water Code § 13241 considerations to the policy choices before it. First, there is no express federal preemption here that would preclude consideration of the Section 13241 factors. Second, the Board cannot reasonably argue that the federal regulatory scheme at issue here “left no room” for supplementary state regulation. Finally, given the Board’s broad discretion when deciding exactly what pollution controls to require, it cannot reasonably maintain that it also lacked the power to consider and reconcile – at a minimum – the six non-exclusive factors for consideration which the California Legislature prescribed in Water Code section 13241.</p>	<p>BILD</p>	<p>The Board is precluded from considering the factors in section 13241 to justify permit requirements that do not comply with federal law. In <i>City of Burbank v. State Water Resources Control Board</i> (2005) 35 Cal.4th 613, the California Supreme Court ruled that regional water boards may not consider the factors in section 13241, including economics, to justify imposing pollutant restrictions that are less stringent than the applicable federal law requires. (Id. at p. 626-627 [“[Water Code s]ection 13377 specifies that [] discharge permits issued by California’s regional boards must meet the federal standards set by federal law. In effect, section 13377 forbids a regional board’s consideration of any economic hardship on the part of the permit holder if doing so would result in the dilution of the requirements set by Congress in the Clean Water Act...Because section 13263 cannot authorize what federal law forbids, it cannot authorize a regional board, when issuing a [] discharge permit, to use compliance costs to justify pollutant restrictions that do not comply with federal clean water standards.”].) Further, under the federal Constitution’s supremacy clause (Article VI), a state law that conflicts with federal law is “without effect.” (Id. at p. 626.)</p> <p>Although the Board is not required to consider the factors set forth in section 13241 in issuing the permit, the Board has nevertheless done so. See Part XIV of the Fact Sheet. In considering costs, the Board has</p>	<p>None</p>

			established requirements that would allow permittees the flexibility to address critical water quality priorities in a focused and cost-effective manner while maintaining the level of water quality protection mandated by the Clean Water Act.	
Factors Affecting Pollutants Concentrations in MS4 Discharges	In the Water Code § 13241 analysis, and the discussion of water quality conditions that could reasonably be achieved, it is stated that the six factors “generally accepted” to affect pollutant concentrations in MS4 discharges were land use, climatic conditions, seasons, percentage impervious, rainfall amount and intensity, runoff amount and watershed size. The County also believes that additional factors, including motor vehicle operation and aerial deposition create pollutant loadings and influence pollutant concentrations. These should be added to the Fact Sheet.	County of Los Angeles	The Board agrees. The factors were added as requested.	Fact Sheet revised.
<i>Economic Considerations</i>				
Economic Considerations	The alleged facts in the economic consideration section of the Fact Sheet misrepresent the permittees' data and fail to consider the economic impact of new, costly aspects of the Permit. The Fact Sheet's open skepticism of municipal financial reports is troubling, and indicates the Board has not taken permittees' actual expenses seriously. Speculations about what people may be willing to pay for cleaner water and social benefits from clean water have no	Cities of Agoura Hills, Artesia, Beverly Hills, Hidden Hills, La Mirada, Monrovia, Norwalk, Rancho Palos Verdes, San Marino, South El Monte, and Westlake Village	As previously noted, the Regional Water Board is not required to consider economics in issuance of this federal permit. Nevertheless, the Board did consider cost estimates that were reported by the permittees in their annual reports during the term of the 2001 permit, as well as a State Water Board funded study that examined the costs of municipal MS4 programs statewide. In Part XIV of the Fact Sheet, the Board acknowledges that the permit would impose additional conditions beyond those included in the 2001 permit. As noted in the Fact Sheet, it is very difficult to determine the true costs of implementing MS4 management programs because of highly variable factors and unknown level of implementation among	None

	<p>real effect on cities' bottom lines.</p>		<p>different municipalities and inconsistencies in reporting by permittees. In addition, it is difficult to isolate program costs attributable to permit compliance. Reported costs of compliance for the same program element can vary widely from permittee to permittee, often by a very wide margin that is not easily explained. Despite these problems, efforts have been made to identify MS4 management costs. In so doing, the Board has seriously considered the economic impact of new provisions of the permit and established requirements that would allow permittees the flexibility to address critical water quality priorities in a focused and cost-effective manner while maintaining the level of water quality protection mandated by the Clean Water Act.</p> <p>The Board also disagrees with the commenters' statement that "speculations about what people may be willing to pay for cleaner water and social benefits from clean water have no real effect on cities' bottom lines." However, even assuming this is true, the Board appropriately considered not only the economics associated with permittees complying with the permit provisions, but also the costs associated with the negative impacts of pollution on the economy and the positive impact of improved water quality. The commenters provide no support for their insinuation that the Board should only consider costs to permittees, and not to society, including the millions of individuals who reside in the permittees' subject to this permit.</p>	
<p>Economic Considerations</p>	<p>The Cities have other functions that require funding. If this Permit is adopted as proposed, even in the best case scenario, spending cuts to other crucial services such as police, fire, and public works are certain. The permittees' dwindling general funds simply cannot take</p>	<p>Cities of Agoura Hills, Artesia, Beverly Hills, Hidden Hills, Lakewood, La Mirada, Monrovia, Norwalk, Rancho Palos Verdes, Rolling</p>	<p>The Board recognizes that municipalities may be in a position to balance competing interests in a time where there is limited staff and resource to implement actions to address its MS4 discharges. However, the Clean Water Act requires MS4 permits to include limitations and controls in order to achieve the standards set forth in the Clean Water Act. This permit is consistent with the Clean Water Act. The</p>	<p>None</p>

	the financial hit the Permit is poised to impose on them. The Cities believes a more measured approach is necessary, especially regarding how compliance in this Permit is achieved.	Hills, San Marino, South El Monte, and Westlake Village	permit, as noted above, includes a significant amount of flexibility for permittees to choose how to implement the permit consistent with other responsibilities of the permittees.	
Economic consideration	The Fact Sheet seeks to rely on cost estimates from the 2001 Permit that do not reflect compliance with the numeric WQBELs and receiving water limits sought to be imposed under the new permit.	City of Signal Hill	<p>The Board considered cost estimates that were reported by the permittees in their annual reports during the term of the 2001 permit, as well as a State Water Board funded study that examined the costs of MS4 programs statewide.</p> <p>As previously noted, the costs of complying with the water quality based effluent limitations and receiving water limitations derived from the 33 TMDLs should not be added to determine the cost of compliance with all TMDLs. Although not required, the Board has considered costs in establishing numeric WQBELs. This is especially evident in the Board allowing permittees to achieve many of the final numeric WQBELs in accordance with lengthy compliance schedules, such that permittees can spread out costs over time.</p> <p>While compliance with most of the numeric WQBELs is a new requirement in this permit, compliance with receiving water limitations is not a new requirement in this permit. That requirement is an existing requirement in the 2001 permit. Thus, the cost estimates self-reported by the permittees should have included that information. In addition, when the Board adopted the water quality objectives that are the receiving water limitations in the permit, it took economic considerations into account. (See <i>In re Los Angeles County Municipal Storm Water Permit Litigation</i> (Sup. Ct. Los Angeles County, March 24, 2005, Case No. BS 080548), Statement of Decision from Phase II Trial on Petitions for Writ of Mandate, p. 21.)</p>	None

<p>Funding/Costs</p>	<p>Relying on the funding formula adopted by the cities to pay for the LA River Metals TMDL requirements, the City of Bradbury would need 180% of its current General Fund budget to pay for the TMDL’s annual costs. That is impossible. Local resources are also directed to a number of health, safety and quality of life factors, such as Police and Fire. Thus, all these factors, health, safety, quality of life and clean water need to be developed in balance with each other.</p> <p>While Bradbury may be the most dramatic case, the new costs will be difficult for any of these cities to absorb under the best of economic circumstances and is complicated by the current economic recession. The 2/3rds (Proposition 218) vote for storm water taxes is a difficult hurdle to overcome, so Bradbury would most likely be forced to cut existing services to afford the TMDL or consider even worse options. By this I mean the City would cease to exist - - placing a greater burden on the other cities and the County of Los Angeles.</p> <p>While the City does not believe the Board’s intent is to bankrupt cities, the simple fact of implementing many of these TMDL’s without further</p>	<p>Cities of Bradbury, Signal Hill, and Pomona</p>	<p>The Los Angeles River Metals TMDL was initially effective January 11, 2006. Following a writ of mandate filed by several cities on February 16, 2006, the Los Angeles Water Board was asked to provide a more detailed alternative analysis on May 24, 2007. The TMDL with the included alternative analysis was readopted and subsequently approved on October 29, 2008 with its original compliance dates. Therefore the City of Bradbury has had 6 years, 9 months to plan for the implementation of the Los Angeles River Metals TMDL. Furthermore, the final compliance date for the Los Angeles River Metals TMDL is January 11, 2028 providing another 16 years to implement the TMDL including determining funding sources and cost effective budgeting strategies.</p> <p>No evidence has been offered to support the claim that any resources would need to be “diverted,” much less, how much, why such alleged “diversions” of resources are significant, and why no other funding sources are available to pay for the needed services, considering possible tax assessments, user fees, grants, loans, etc. Notably, Signal Hill applied and obtained a 100% grant from the State Water Resources Control Board for its Hamilton Bowl project, to comply with the Trash TMDL. Thus TMDL compliance cost Signal Hill virtually nothing. Other such grants, favorable loans, and other funding mechanisms are plainly available.</p> <p>In fact, no specific showing of any sort, much less evidence of any kind, has ever been offered to support the claim that the cost of the Los Angeles River Metals TMDL and other TMDLs will feasibly prevent any municipality or other jurisdiction from providing basic health and safety services to its constituents.</p> <p>While not required, the Board considered the factors in California Water Code section 13241, including</p>	<p>None</p>
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	consideration to their economic impact balanced with improved water quality, this is exactly what will happen around the San Gabriel Valley and throughout the State. We respectfully request the Board complete an economic analysis regarding the economic implications of the permit's implementation and work directly with the cities to find cost effective solutions to these issues affecting all of us.		economic considerations, in the Fact Sheet. The commenters do not detail what they believe is inadequate in the analysis.	
Cost/Funding	Any additional funds needed to raise money for stormwater programs would need to come from increased/new stormwater fees and grants. New fees for stormwater are regulated under the State's Prop 218 regulations, and require a public vote; so, this is an item that is not under direct control of the municipalities-the Permit language should reflect this.	Cities of Inglewood, La Verne, Lakewood, Signal Hill, Pomona	The commenters have not provided adequate evidence for these assertions. The language in the Fact Sheet is appropriate as-is.	None
Cost/Funding	It is also worth noting that the cost for complying with both the stormwater regulations and TMDL requirements should be carefully considered. With these types of economic implications, it is critical that this Regional Board and their staff more carefully complete a fiscal analysis of what it will cost cities to be in compliance with the draft order.	Cities of Bradbury, LaVerne, Rolling Hills, Signal Hill	Although not required, the Board considered the factors in section 13241 of the Water Code, including economic considerations, in the Fact Sheet. The commenter does not detail what portions of this analysis was inadequate. As noted in the Fact Sheet, it is very difficult to determine the true costs of implementing MS4 management programs because of highly variable factors and unknown level of implementation among different municipalities and inconsistencies in reporting by permittees.	None
Cost/Funding	The loss of redevelopment funding is a significant problem for Signal	City of Signal Hill	The Board has seriously considered the economic impact of new provisions of the permit and	None

	<p>Hill, where the Signal Hill Redevelopment Agency had budgeted over \$800,000 this year to begin to address five of the six TMDLs that currently regulate our small, 2.2 square mile community. AB 1X26 effectively dissolved redevelopment agencies statewide and has resulted in Signal Hill’s having to devote additional General Fund revenues to implement our stormwater program at a very difficult financial time for the community. Without the planned Redevelopment Agency expenditures, the City has budgeted \$869,235 for the coming fiscal year (see table below) to fund its Stormwater Program. However, this amount is far below what is required to fully address the TMDLs that impact our city. Our estimated stormwater budget for the next few years to fully address permit requirements and TMDL implementation is approximately \$1.6 million per year. We don’t foresee a time in the next four to five years when our General Fund will be able to keep up with the stormwater costs resulting from the Tentative Order, as written, which means that existing programs will need to be severely reduced or eliminated to fund the new stormwater requirements</p>		<p>established requirements that would allow permittees the flexibility to address critical water quality priorities in a focused and cost-effective manner while maintaining the level of water quality protection mandated by the Clean Water Act. The permit, as noted above, includes a significant amount of flexibility for permittees to choose how to implement the permit consistent with limited resources and other responsibilities of the permittees.</p>	
<p>Cost/Funding</p>	<p>The Watermaster supports the</p>	<p>Main San Gabriel</p>	<p>The Regional Water Board has always encouraged</p>	<p>None</p>

	<p>“Watershed Approach” of developing tailor-made solutions for unique conditions in each watershed. We respectfully suggest that the Board consider encouraging cost-effective activities to increase upstream storm water capture for groundwater recharge to enhance local water supply and reliability.</p>	<p>Watermaster</p>	<p>and supported cost effective means of storm water capture for groundwater recharge for the enhancement of local water supply and reliability. There are several cost effective BMPs suggested in the MCM section of the permit. In addition, the tentative permit was revised in response to other comments to allow an enhanced watershed management program that would promote groundwater recharge.</p>	
<p>Permit Provisions</p>	<p>We urge that the permit provisions are developed on conditions based on a reasonable timeframe in balance with the existing economy, fiscal resources available, and other health, safety, regulatory and quality of life factors that local agencies are responsible for.</p>	<p>City of Inglewood, City of La Verne</p>	<p>The Board believes that the permit provides reasonable timeframes, while protecting water quality as required by the Clean Water Act.</p>	<p>None</p>
<p>Cost consideration</p>	<p>The Board, who are appointed and not elected, are approving a system that has no real solution and sets up a financing tool that should be established by elected officials with considerations of revenue and budgets.</p>	<p>Joyce Dillard</p>	<p>The commenter does not detail why she believes the permit will be unsuccessful. In issuing the permit, the Board has considered costs in the Fact Sheet. The commenter does not explain why the Board’s consideration is inadequate.</p>	<p>None</p>
<p>Assembly Bill (AB) 2554</p>	<p>It is premature and improper to assume that permittees will obtain funding from proposed ballot measures and other sources of funding that have not been approved or voted on by the public. The discussions about AB 2554 on pages F-16 and F-142 to F-143 is inaccurate and misleading and should be deleted because there is no assurance the fee will be adopted. Neither AB 2554 nor a</p>	<p>Cities of Agoura Hills, Artesia, Beverly Hills, Hidden Hills, La Mirada, Monrovia, Norwalk, Rancho Palos Verdes, Pomona, San Marino, Santa Monica, South El Monte, and Westlake Village; LACFCD; County of</p>	<p>The permit does not presume that permittees will obtain funding from proposed ballot measures, including AB 2554. The Board acknowledges that there is no guarantee that the funds from Assembly Bill 2554 will be approved. The permit simply describes possible funding sources that may be available to permittees. The Fact Sheet analyzes several other sources of funding including grants and loans.</p> <p>Furthermore, the revenues presented in the Fact Sheet are based on numbers provided by the Los Angeles</p>	<p>Clarifying changes made</p>

	<p>fee is awaiting voter approval. No fee has been determined or imposed by the LACFCD and it cannot be imposed unless it has first been considered by LACFCD's Board of Supervisors at a public hearing at which the property owners subject to the fee have the right to submit protests. Therefore, the revenue estimates are speculative. Even if the initiative is approved, funds would not be available until 2014 well after the deadline for a majority of the compliance deadlines in the Permit. Also, the initiative will not cover all the costs imposed on all permittees by the Permit.</p>	<p>Los Angeles</p>	<p>County Flood Control District in a presentation dated October 20, 2011 www.smbrc.ca.gov/about_us/agendas/2011oct/Ordinance Presentation (SMBRC).pdf.</p> <p>Clarifying changes reflecting the status of AB 2554 and providing clarity about the approval process have been made.</p>	
<p>Assembly Bill (AB) 2554</p>	<p>It appears from the magnitude of increased costs associated with the Tentative Order that Regional Board staff assumes that the stormwater fee proposed by the Los Angeles County Flood Control District will be approved by property owners next spring. Actually, passage of the fee is far from certain. In fact, the proposed fee came before the County Board of Supervisors three times before staff was directed to move forward with creation of a Final Draft Ordinance, a protest hearing, and a possible vote. If the Regional Water Board agrees with staff that the new costly programs should be required, perhaps those programs should be contingent upon passage of the stormwater quality fee next</p>	<p>City of Signal Hill</p>	<p>The permit does not presume that permittees will obtain funding from proposed ballot measures, including AB 2554. The Board acknowledges that there is no guarantee that the funds from Assembly Bill 2554 will be approved. The permit simply describes possible funding sources that may be available to permittees.</p> <p>The Fact Sheet analyzes several other sources of funding including grants and loans.</p>	<p>None</p>

	<p>year. This would be parallel to the actions taken by the University of California Board of Regents in freezing undergraduate and some graduate school tuitions pending the vote on the Proposition 30 tax hike measure in November</p>			
<p>Assembly Bill (AB) 2554</p>	<p>At this time, there is no guarantee that the Los Angeles County Flood Control District's water quality funding initiative will be passed and approved by the property owners. Given this uncertainty and the current economic climate which has also affected the State Regional Water Quality Control Board programs and staffing, reasonable and achievable requirements are a must. The draft MS4 permit as currently written is not achievable and will subject permittees to violations, penalties, and fines.</p>	<p>Cities of Burbank, Signal Hill, and Pomona</p>	<p>The permit does not presume that permittees will obtain funding from proposed ballot measures, including AB 2554. The Board acknowledges that there is no guarantee that the funds from Assembly Bill 2554 will be approved. The permit simply describes possible funding sources that may be available to permittees. The Fact Sheet analyzes several other sources of funding including grants and loans.</p> <p>The Board disagrees with the commenter's assumptions that the permit is not achievable and will ultimately lead to permittee violations, penalties and fines. The commenters do not detail what potential violations and penalties will occur. The Board has seriously considered the economic impact of new provisions of the permit and established requirements that would allow permittees the flexibility to address critical water quality priorities in a focused and cost-effective manner while maintaining the level of water quality protection mandated by the Clean Water Act. The permit, as noted above, includes a significant amount of flexibility for permittees to choose how to implement the permit consistent with limited resources and other responsibilities of the permittees. Furthermore, the permit allows for many options for flexibility, including application for Time Schedule Orders and creating a Watershed Management Program to tailor an implementation program based on the specific priorities identified by permittees.</p>	<p>None</p>
<p><i>Unfunded State Mandates</i></p>				

<p>Jurisdiction</p>	<p>The Board has no jurisdiction to determine whether requirements included in the permit are federal, as opposed to state, mandates for the purposes of Article XIII B, section 6 of the California Constitution. The California Legislature has specifically charged the Commission on State Mandates with the task of determining whether a mandate is a state or federal mandate and whether a local agency or school district is entitled to a subvention of funds pursuant to the California Constitution. As such, any such finding or determination in this Permit is entitled to no deference and carries no weight.</p>	<p>County of Los Angeles</p>	<p>The Board agrees that the Commission on State Mandates (Commission) ultimately has jurisdiction to determine whether a permit provision constitutes an unfunded state mandate requiring state subvention. However, it is entirely appropriate for the Board to set forth its legal basis to support the provisions in the tentative permit, finding them to be necessary and appropriate to meet the federal Clean Water Act standards. While the Commission may be an expert in state mandates, it has no expertise in the field of water law. The Board’s findings are the expert conclusions of the principal state agency charged with implementing the NPDES program in California. (Cal. Wat. Code, §§ 13001, 13370.) Thus, the Commission should defer to the Board’s implementation of federal water quality law.</p> <p>Further, many commenters insist that the Board must recognize that certain permit provisions constitute unfunded state mandates. These commenters state or insinuate that certain permit provisions may not be adopted at all or may not adopted unless the State first provides funding to the permittees to carry out those provisions. Accordingly, the Board’s findings and determinations on this issue are nonetheless appropriate and necessary to express the Board’s opinion that the tentative permit is the result of a federal, and not a state, mandate.</p>	<p>None</p>
<p>Unfunded State Mandates</p>	<p>The statement that the requirements of this order do not constitute a new program or higher level of service is factually incorrect. The draft Permit contains many new obligations and requirements that were not previously imposed on the Permittees, including incorporation of a number of TMDLs into the Permit. These</p>	<p>County of Los Angeles; Cities of Pomona, Agoura Hills, Artesia, Beverly Hills, Hidden Hills, La Mirada, Monrovia, Norwalk, Rancho Palos Verdes, San Marino, South El Monte, and Westlake</p>	<p>The Board acknowledges that several of the elements of the tentative permit have been improved upon by including more specific requirements. The additional specificity that will likely require modifications to the permittees existing programs, however, does not mean that the specific requirements constitute new programs or higher levels of service as compared to the requirements contained in Order No. 01-182. While certain specific requirements are new to this permit, the overarching requirements to prohibit or reduce pollutants in discharges from MS4s is dictated by the</p>	<p>None</p>

<p>requirements are new programs or higher levels of service.</p>	<p>Village</p>	<p>Clean Water Act and is not new to this permit cycle. The relevant “activity” for purposes of state mandates law is the federal requirements contained in section 402(p)(3)(B) of the Clean Water Act. The Clean Water Act mandates that all NPDES permits for discharges from MS4s effectively prohibit non-storm water discharges and include “controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.” (33 U.S.C. §1342(p)(3)(B)(ii)-(iii).) These requirements are not new and are imposed on all entities that own or operate a MS4. The inclusion of new and advanced measures as the MS4 programs evolve and mature over time is anticipated under the Clean Water Act (55 Fed. Reg. 47990, 48052 (Nov. 16, 1990)), and these new and advanced measures do not constitute a new program or higher level of service and, thus, no state mandate.</p> <p>With regards to the incorporation of TMDLs into the permit, those provisions are not only required by federal law (as explained below), they also do not constitute a new program or higher level of service. Since at least 2001, through Order No. 01-182, the permittees have been required to ensure that their MS4 discharges do not cause or contribute to a violation of water quality standards. TMDLs are required to be developed when waterbodies are considered impaired; i.e., water quality standards are not being achieved. Through adoption of the various TMDLs being incorporated into the permit, the Board determined that the permittees MS4 discharges are causing or contributing to violations of water quality standards and assigned the MS4 discharges wasteload allocations. Thus, for the TMDLs being incorporated</p>	
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			<p>into the permit, permittees are actually subject to less stringent requirements than that required in Order No. 01-182 because permittees are not being required to comply with water quality standards for those pollutants. The vast majority of the TMDL provisions being incorporated into the permit allow permittees to comply with effluent limitations and/or receiving water limitations according to compliance schedules, often very lengthy ones, in order to eventually achieve water quality standards.</p>	
<p>Unfunded State Mandates</p>	<p>The Board makes a unilateral statement that the permit requirements do not exceed Federal Requirements and therefore are not unfunded mandates. Requests that the Regional Board substantiate this statement for each section of the permit. Bradbury would also like to refer that the court decisions on unfunded mandates claims are still on appeal and it is premature to conclude on the merits of the appeal.</p>	<p>Cities of Bradbury and Torrance</p>	<p>The Board has already indicated throughout the permit and in various responses to comments that the permit requirements are not more stringent than the minimum federal requirements. A determination of whether the conditions contained in the permit exceed the requirements of federal law cannot be based on a point by point comparison of the permit conditions. Rather, the correct analysis in determining whether a MS4 permit constitutes a state mandate is to evaluate whether the permit as a whole -- and not a specific permit provision -- exceeds federal law. (<i>State of Cal. v. Comm. On State Mandates</i> (Super. Ct. Sacramento County, 2012, No. 34-2010-80000604), <i>State of Cal. v. County of Los Angeles</i> (Super. Ct. Los Angeles County, 2011, No. BS130730.) The requirements of the permit, taken as a whole rather than individually, are necessary to protect water quality in accordance with federal law.</p> <p>The Board acknowledges that the court decisions on unfunded mandates claims are still on appeal. The Board may, however, refer to such decisions. The fact that the decisions are on appeal does not change the Board's views on this issue. The Board maintains at this time that the provisions of the permit are not unfunded state mandates and will continue to include appropriate provisions in MS4 permits to protect the water quality and beneficial uses of the waters of the region in accordance with federal law.</p>	<p>None</p>

<p>Unfunded State Mandates</p>	<p>The permit contains provisions that exceed federal requirements, such as complying with monitoring, numeric WQBELs, TMDLs, RWLs, non-stormwater discharge prohibition through and from the MS4, MCMs, groundwater recharge requirements, and construction/development requirements. These mandates are imposed at the Regional Board's discretion and go beyond the specific requirements of either the Clean Water Act or the EPA's regulations implementing the Clean Water Act, and thus exceed the "Maximum Extent Practicable" ("MEP") standard. These provisions should therefore be deleted.</p>	<p>Cities of Agoura Hills, Artesia, Beverly Hills, Hidden Hills, La Mirada, Monrovia, Norwalk, Rancho Palos Verdes, San Marino, South El Monte, Westlake Village, Baldwin Park, Bradbury, Carson, Covina, Duarte, Glendora, Irwindale, Lawndale, Pico Rivera, La Verne, and Pomona</p>	<p>This permit implements federally mandated requirements. This includes federal requirements to effectively prohibit non-storm water discharges, to reduce the discharge of pollutants to the maximum extent practicable, and to include such other provisions as the Regional Water Board determines appropriate for the control of such pollutants. (33 U.S.C. §1342(p)(3)(B).) The Board has determined that the requirements in the permit are necessary to protect water quality in accordance with federal law. This includes requirements pertaining to monitoring, numeric WQBELs, TMDLs, RWLs, non-stormwater discharge prohibition through and from the MS4, MCMs, groundwater recharge requirements, and construction/development requirements. The Board has explained its rationale for these requirements in the Fact Sheet and in various responses to comments. In addition, in issuing MS4 permits, “[t]he permitting agency has discretion to decide what practices, techniques, methods and other provisions are appropriate and necessary to control the discharge of pollutants.” (<i>City of Rancho Cucamonga v. Regional Water Quality Control Bd.-Santa Ana Region</i> (2006) 135 Cal.App.4th 1377, 1389.) However, the “Regional Board must comply with federal law requiring detailed conditions for NPDES permits.” (<i>Ibid.</i>) Further, USEPA expects the permitting authority to develop the specific practices that comply with the Clean Water Act on a permit-by-permit basis. (<i>NRDC v. USEPA</i> (9th Cir. 1992) 966 F.2d 1292, 1308.) To the extent the Board is exercising discretion in including certain permit requirements, the Board is exercising discretion required and/or authorized by federal law, not state law. (See, <i>City of Rancho Cucamonga v. Regional Water Quality Control Bd.-Santa Ana Region</i> (2006) 135 Cal.App.4th 1377, 1389; <i>Building Industry Ass’n of San Diego County v. State Water Resources Control Bd.</i> (2004) 124 Cal.App.4th 866, 882-883.)</p>	<p>None</p>
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			<p>Further, the MEP standard is a flexible standard that balances a number of considerations, including technical feasibility, cost, public acceptance, regulatory compliance, and effectiveness. (<i>Id.</i> at pp. 873, 874, 889.) Such considerations change over time with advances in technology and with experience gained in storm water management. (<i>55 Fed. Reg.</i> 47990, 48052 (Nov. 16, 1990).) Accordingly, a determination of whether the conditions contained in this permit exceed the requirements of federal law cannot be based on a point by point comparison of the permit conditions with federal law. Rather, the appropriate focus is whether the permit conditions, as a whole, exceed the MEP standard. (<i>State of Cal. v. Comm. On State Mandates</i> (Super. Ct. Sacramento County, 2012, No. 34-2010-80000604), <i>State of Cal. v. County of Los Angeles</i> (Super. Ct. Los Angeles County, 2011, No. BS130730.)</p> <p>The commenters have also failed to cite to any evidence that actually shows how these specific requirements exceed the MEP standard, or applicable requirements of federal law.</p> <p>Lastly, unless and until a particular provision is determined by the Commission on State Mandates, through a Test Claim proceeding, to be an unfunded state mandate for which reimbursement is required, the Regional Water Board is not, as some commenters assert, precluded from adopting such provisions. The Commission does not determine the validity of any particular provision; it address only whether the State or the local governments will be required to pay for that provision.</p>	
<p>Unfunded State Mandates</p>	<p>Where the draft Permit directs the Permittees to undertake a specific program in order to implement the MEP standard, as opposed to</p>	<p>County of Los Angeles</p>	<p>MS4 permits issued by the Regional Water Board must ensure compliance with the Clean Water Act. (Wat. Code, §§ 13370(c), 13372(a), 13377.) Federal law mandates that permits issued for MS4s require</p>	<p>None</p>

	<p>allowing the Permittees to design their own program, this directive constitutes a state mandate.</p>		<p>certain actions that will result in the elimination or reduction of pollutants to receiving waters and the state is required, by federal law, to select the controls necessary to meet this standard. (See <i>NRDC v. USEPA</i> (9th Cir. 1992) 966 F.2d 1292, 1308; <i>City of Rancho Cucamonga v. Regional Water Quality Control Bd., Santa Ana Region</i> (2006) 135 Cal.App.4th 1377, 1389-90.) In creating a permit system for dischargers from MS4s, Congress intended to implement actual programs. (<i>Natural Resources Defense Council, Inc. v. Costle</i> (D.C.Cir.1977) 568 F.2d 1369, 1375.) In issuing MS4 permits, “[t]he permitting agency has discretion to decide what practices, techniques, methods and other provisions are appropriate and necessary to control the discharge of pollutants.” (<i>City of Rancho Cucamonga v. Regional Water Quality Control Bd.-Santa Ana Region</i> (2006) 135 Cal.App.4th 1377, 1389.) However, the “Regional Board must comply with federal law requiring detailed conditions for NPDES permits.” (<i>Ibid.</i>) Further, USEPA expects the permitting authority to develop the specific practices that comply with the Clean Water Act on a permit-by-permit basis. (<i>NRDC v. USEPA</i> (9th Cir. 1992) 966 F.2d 1292, 1308.) The Regional Water Board, as the permitting agency, thus has discretion to decide what controls, practices, techniques, methods and other provisions are appropriate and necessary to control the discharge of pollutants. To the extent the Board is exercising discretion in including provisions the Board deems appropriate to control pollutants, the Board is exercising discretion required and/or authorized by federal law, not state law.</p> <p>Further, notwithstanding the above, the Board has provided permittees a significant amount of flexibility to choose how to implement the permit. The permit provides permittees the flexibility to address critical water quality priorities, namely discharges to waters</p>	
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			<p>subject to TMDLs, but aims to do so in a focused and cost-effective manner while maintaining the level of water quality protection mandated by the Clean Water Act and other applicable requirements. For example, the inclusion of a watershed management program option allows permittees to submit a plan, either individually or in collaboration with other permittees, for Board approval that would allow actions to be prioritized based on specific watershed needs. The permit also allows permittees to customize monitoring requirements, which they may do individually or in collaboration with other permittees.</p>	
<p>Unfunded State Mandates</p>	<p>Obligations under the draft Permit are not similar to obligations on non-governmental dischargers. Obligations to inspect for illicit connections and discharges, to inspect commercial, industrial and construction sites, to reduce wasteload pollutant loads in compliance with TMDLs, to impose minimum BMPs for roadway paving and repairs and to implement regional watershed management programs, monitoring, and other requirements are obligations that are not imposed on non-governmental dischargers.</p>	<p>County of Los Angeles</p>	<p>There are a number of factors that must be established before a requirement will be found to be an unfunded state mandate warranting state reimbursement. One of the statutory bases for establishing that a permit provision amounts to an unfunded state mandate requiring reimbursement is for the municipality to show that the requirements are unique to local government and do not apply generally to all residents and entities in the state. Another factor is that the municipality has to show the requirement is a state mandate as opposed to a federal mandate. Most of the obligations noted by the commenter as only being imposed on governmental dischargers are specifically required by federal law, not state law. (See generally 40 C.F.R. § 122.26.) Further, obligations to reduce wasteload pollutant loads in compliance with TMDLs are imposed on both governmental and non-governmental dischargers.</p> <p>The commenter also fails to acknowledge the obligations that are imposed on the governmental permittees in this permit that are less stringent than non-governmental dischargers. Many provisions of the permit regulate the discharge of waste in municipal storm water under the federal MEP standard, not the BAT/BCT standard that applies to other types of discharges. In addition, this permit only</p>	<p>None</p>

			includes numeric effluent limits for pollutants that are subject to TMDLs. Non-governmental dischargers are routinely subject to numeric effluent limits for pollutants that are subject to TMDLs and pollutants that are not. These provisions, therefore, regulate the discharge of waste in municipal storm water more leniently than the discharge of waste from non-governmental sources.	
Unfunded State Mandates	Permittees have not requested this permit; they are obligated under federal law to apply for it.	County of Los Angeles	The Board disagrees. Permittees do have a choice. The permittees may request coverage under a MS4 permit or comply with the complete prohibition against the discharge of pollutants contained in Clean Water Action section 301(a). (33 U.S.C. § 1311(a)). This choice is provided by the federal Clean Water Act, not state laws. To the extent that the local agencies have voluntarily availed themselves of the permit, the program is not a state mandate. (Accord <i>County of San Diego v. State of California</i> (1997) 15 Cal.4th 68, 107-108.) Thus, meeting the requirements of a MS4 permit is a federal mandate, and not an unfunded state mandate.	None
Unfunded State Mandates	The permittees do not necessarily have the requisite authority to levy fees to pay for compliance with the permit. Funding mechanisms are speculative because they may either be contingent upon voter approval or limited to cover all or some of the costs imposed by the Permit. Such speculative funding sources cannot count as viable sources of funding so as to preclude a subvention claim. The fee authority of the Permittees is extremely limited, and more so in the wake of the recent passage of Proposition 26.	County of Los Angeles; Cities of Agoura Hills, Artesia, Beverly Hills, Hidden Hills, La Mirada, Monrovia, Norwalk, Rancho Palos Verdes, San Marino, South El Monte, and Westlake Village	Section 6 of Article XIII B of the California Constitution requires subvention only when the costs in question can be recovered solely from tax revenues, and not if the costs can be reallocated or paid for with fees. Numerous activities contribute to the pollutant loading in the MS4. The permittees can levy fees on these activities, independent of real property ownership. (See, e.g., <i>Apartment Ass'n of Los Angeles County, Inc. v. City of Los Angeles</i> (2001) 24 Cal.4th 830, 842 [upholding inspection fees associated with renting property].) The permittees have the authority to levy fees to pay for compliance with the permit within the meaning of Government Code section 17556(d), even if adoption of a fee is contingent on the outcome of an election or vote. (See California Constitution XIII D, section 6, subdivision (c); see also <i>Howard Jarvis Taxpayers Association v. City of</i>	None

			<p><i>Salinas</i> (2002) 98 Cal. App. 4th 1351, 1358-1359.) When local agencies have the legal authority to levy fees, they do not have to spend tax proceeds to fund activities and no subvention is therefore required. (<i>County of Los Angeles v. Commission on State Mandates</i> (2003) 110 Cal.App.4th 1176, 1189; <i>Redevelopment Agency v. Commission on State Mandates</i> (1997) 55 Cal.App.4th 976, 987.) The plain language of the exception in Government Code section 17556(d) is based on a claimant’s authority, i.e., the right or power, to levy fees, not on the claimant’s practical ability in light of surrounding economic circumstances to levy fees. (<i>Connell v. Superior Court</i> (1997) 59 Cal.App.4th 382, 401-402.)</p> <p>In addition, additional fee authority has recently been established through amendments to the Los Angeles County Flood Control Act (Chapter 755 of the Statutes of 1915, as amended by Assembly Bill 2554 (2010)) to provide funding for municipalities, watershed authority groups, and the LACFCD to initiate, plan, design, construct, implement, operate, maintain, and sustain projects and services to improve surface water quality and reduce storm water and non-storm water pollution within the LACFCD service area. The Board acknowledges that this initiative is currently awaiting consideration by the LACFCD Board of Supervisors. However, if approved, the initiative could create estimated annual revenue of \$300 million, which would directly support the permittees’ implementation of the requirements in the permit.</p>	
<p>Unfunded State Mandates</p>	<p>The Permit goes beyond federal law, as the Permit is at least twice as long, and in some cases, three times as long as other MS4 permits developed by other Regional Boards in the State of California, such as the Lahontan</p>	<p>Cities of Agoura Hills, Artesia, Beverly Hills, Hidden Hills, La Mirada, Monrovia, Norwalk, Rancho Palos Verdes, San</p>	<p>The permit is consistent with federal requirements and does not go beyond federal law. The permit includes requirements the Board has deemed necessary to protect water quality to meet Clean Water Act standards. MS4 permits from different regions cannot be compared without looking at the different issues facing each region. The length of a permit is not</p>	<p>None</p>

	<p>and Central Valley Regional Boards, not to mention permits developed by EPA. This means that either some Regional Boards are failing to impose federally mandated requirements pursuant to the Clean Water Act, or the more likely explanation is that the Regional Board is imposing requirements that go beyond federal law.</p>	<p>Marino, South El Monte, and Westlake Village</p>	<p>indicative of consistency with the Clean Water Act. The discharges that the Lahontan and Central Valley Regions are most concerned with are typically nonpoint source discharges that cannot be regulated under NPDES requirements (e.g., agriculture and silviculture). There are, however, examples of MS4 permits with similar provisions and lengths in the San Diego and San Francisco Bay Regions. Each region implements the requirements of the Clean Water Act by including provisions in the MS4 permits with the specificity that is necessary to protect water quality and beneficial uses for the waters in that region. The requirements in this permit include the specificity that has been demonstrated to be necessary to be protective of water quality, consistent with the Clean Water Act, and do not constitute an unfunded state mandate.</p>	
<p>MCMs</p>	<p>The Permit's Minimum Control Measure program ("MCM Program") qualifies as a new program or a program requiring a higher level of service for which state funds must be provided. The particular elements of the MCM Program that constitute unfunded mandates are:</p> <ul style="list-style-type: none"> • The requirements to control, inspect, and regulate non-municipal permittees and potential permittees (Permit at pp. 38-40); • The public information and participation program (Permit at pp. 58-60); • The industrial/ commercial facilities program (Permit at p. 63); • The public agency activities 	<p>Cities of Agoura Hills, Artesia, Beverly Hills, Hidden Hills, La Mirada, Monrovia, Norwalk, Rancho Palos Verdes, San Marino, South El Monte, and Westlake Village</p>	<p>The Board disagrees. The MCM program is required by federal regulations. (See 40 C.F.R. § 122.26(d)(2)(iv).) In addition, the MCM program is not a new program or a program requiring a higher level of service. The previous permit, Order No. 01-182, included many of the same MCM requirements, which have been carried over to this permit.</p>	<p>None</p>

	<p>program (Permit at pp. 56-63); and</p> <ul style="list-style-type: none"> • The illicit connection and illicit discharge elimination program (Permit at pp. 106-109). 			
<p>Inspections</p>	<p>The requirement that the permittees inspect and regulate other, non-municipal NPDES permittees constitutes an unfunded mandate. Controlling pollutants from construction and industrial activities is a state responsibility. There are no adequate alternative sources of funding for inspections. NPDES permittees already pay the Regional Boards fees that cover such inspections in part. It is inequitable to both cities and individual permittees for the Regional Board to charge these fees and then require cities to conduct and pay for inspections without providing funding.</p>	<p>Cities of Agoura Hills, Artesia, Beverly Hills, Hidden Hills, La Mirada, Monrovia, Norwalk, Rancho Palos Verdes, San Marino, South El Monte, Westlake Village, Signal Hill, and Santa Clarita</p>	<p>“Federal law, either expressly or by implication, requires NPDES permittees to perform inspections for illicit discharge prevention and detection; landfills and other waste facilities; industrial facilities; construction sites; certifications of no discharge; non-storm water discharges; permit compliance; and local ordinance compliance.” (<i>City of Rancho Cucamonga v. Regional Water Quality Control Bd.-Santa Ana Region</i> (2006) 135 Cal.App.4th 1377, 1390.) Federal regulations require that actions designed to reduce pollutants to the maximum extent practicable include management practices or controls, including priorities and procedures for inspections, of industrial facilities and construction sites. (See 40 C.F.R. § 122.26(d)(2)(iv), subdivisions (B), (C)(1), and (D).) Such inspections are necessary to confirm that best management practices are being effectively implemented in compliance with federal law.</p> <p>The provisions contained in the permit pertaining to the inspection and facility control program requirements for industrial and commercial facilities, as well as construction sites, are based on the requirements of Order No. 01-182. Those requirements, among others, were the subject of litigation between several permittees and the Regional Water Board. In that case, the Los Angeles County Superior Court upheld the inspection and facility control program requirements for industrial/commercial facilities and construction sites in Order No. 01-182 as being consistent with federal law. (<i>In re Los Angeles County Municipal Storm Water Permit Litigation</i> (Sup. Ct. Los Angeles</p>	<p>None</p>

			<p>County, March 24, 2005, Case No. BS 080548), Statement of Decision from Phase II Trial on Petitions for Writ of Mandate, pp. 16-19.) The Court also addressed the permittees’ claims that the requirements in Order No. 01-182 shifted the Regional Water Board’s inspection responsibility under State Water Board issued general NPDES permits for these types of facilities onto the local agencies. The Court disagreed, stating: “The Court agrees with [the Regional Water Board] and Intervenors that the United States EPA considered obligations under state-issued general permits to be separate and distinct. Despite the similarity between the general permits and the local storm water ordinances, both must be enforced. [Citations.] EPA requires permittees to conduct inspections of commercial and industrial facilities, as well as of construction sites. [Citation.]This Court finds that the state-issued general permits do not preempt local enforcement of local storm water ordinances. (See State Board Order No. 99-08, [citation].) [¶] Therefore, this Court finds that requiring permittees to inspect commercial and industrial facilities and construction sites is authorized under the Clean Water Act, and both the Regional Board and the municipal permittees or the local government entities have concurrent roles in enforcing the industrial, construction and municipal permits. The Court finds that the Regional Board did not shift its inspection responsibilities to Petitioners. [¶] ... The Court further notes that the Permit issued to local entities, who are Petitioners here, does not refer to any inspection obligations related to state-issued permits. [Citation.] There is no duplication of efforts and no shifting of inspection responsibility in derogation of the Regional Board’s responsibility here. The Regional Board is not giving up its own responsibilities, and there is nothing arbitrary or capricious about the Permit’s inspection provisions.” (<i>Id.</i> at 17-18.) Moreover, the comments stating the</p>	
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			<p>Board can collect a fee for state inspections required under the state-issued permit is not relevant as these inspections are independent from the obligations imposed on the permittees under the permit.</p> <p>Further, USEPA has concluded that the inspection requirements in Order No. 01-182 are within the maximum extent practicable standard. (See Letter dated April 10, 2008; signed by Alexis Strauss, USEPA.) In addition to being required by federal law, the inspections requirements are existing requirements, and thus do not constitute a new program or a program requiring a higher level of service.</p>	
<p>Water Quality Standards</p>	<p>If strict compliance with state water quality standards in receiving water bodies is required - including state water quality standard-based wasteload allocations - in the MS4 itself or at outfall points and in receiving water bodies, the entire Permit will constitute an unfunded mandate because such a requirement exceeds both the Federal standard and the requirements of prior permits, despite the fact no funding will be provided.</p>	<p>Cities of Agoura Hills, Artesia, Beverly Hills, Hidden Hills, La Mirada, Monrovia, Norwalk, Rancho Palos Verdes, San Marino, South El Monte, and Westlake Village</p>	<p>The permit does not require strict compliance with water quality standards in that it provides permittees with schedules that Board has determined necessary to provide a path to compliance with water quality standards. If it did require strict compliance, permittees would not only be subject to numeric WQBELs for pollutants that are subject to TMDLs, but also would be immediately subject to numeric WQBELs for pollutants that are not subject to TMDLs. This permit only establishes numeric WQBELs for pollutants that are subject to a TMDL.</p> <p>Notwithstanding the above, even if the Board were requiring strict compliance with state water quality standards, such a requirement would not exceed federal law. Section 402(p)(3)(B)(iii) of the Clean Water Act requires the Regional Water Board to impose permit conditions, including: “management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator of the State determines appropriate for the control of such pollutants.” (emphasis added.) As determined by the Ninth Circuit Court of Appeal, “[u]nder [the] discretionary provision [of section 402(p)(3)B)(iii)], the EPA has the authority to</p>	<p>None</p>

			<p>determine that ensuring strict compliance with state water-quality standards is necessary to control pollutants.” (<i>Defenders of Wildlife v. Browner</i> (9th Cir. 1999) 191 F.3d 1159, 1166.) The Board, which is authorized to enforce the Clean Water Act pursuant to California Water Code sections 13370 and 13377, can also require strict compliance with water quality standards. To date, the permittees have been unable to adequately protect water quality in the receiving waters, as demonstrated by the number of Clean Water Act section 303(d) listed impaired water bodies. Thus, if the Board were to require strict compliance with water quality standards, it would be federally authorized.</p> <p>Such a requirement would also not exceed requirements in the prior permit. Since at least 2001, through Order No. 01-182, the permittees have been required to ensure that their MS4 discharges do not cause or contribute to a violation of water quality standards. Thus, such a requirement would be considered an existing requirement, and could not be considered a new program or a program requiring a higher level of service. In addition, in the judicial litigation concerning Order No. 01-182, the Los Angeles Superior Court found that the terms of Order No. 01-182, including the receiving water limitations, were consistent with the MEP standard. (See <i>In re Los Angeles County Municipal Storm Water Permit Litigation</i> (Sup. Ct. Los Angeles County, March 24, 2005, Case No. BS 080548), Statement of Decision from Phase I Trial on Petitions for Writ of Mandate, pp. 4-9.)</p>	
<p>Numeric Limits</p>	<p>The incorporation of numeric limits as a means of requiring compliance with TMDLs or receiving water limits are unfunded state mandates as they are requirements that are not</p>	<p>City of Signal Hill</p>	<p>The inclusion of numeric limits does not cause the permit to be more stringent than federal law. Federal law authorizes both narrative and numeric effluent limitations to meet state water quality standards. Thus, the inclusion of numeric limits as discharge specifications in an NPDES permit in order to achieve</p>	<p>None</p>

	<p>mandated by federal law.</p>		<p>compliance with water quality standards is not a more stringent requirement than the inclusion of BMP based permit limitations to achieve water quality standards. While expressed differently, both types of limits have the same goal, which are to achieve compliance with water quality standards.</p> <p>The Board also notes that Order No. 01-182 required permittees to comply with receiving water limitations. The receiving water limitations are the water quality standards for a specific water body, which are generally expressed numerically. In the judicial litigation concerning Order No. 01-182, the Los Angeles Superior Court found that the terms of Order No. 01-182, including the receiving water limitations, were consistent with the MEP standard. (See <i>In re Los Angeles County Municipal Storm Water Permit Litigation</i> (Sup. Ct. Los Angeles County, March 24, 2005, Case No. BS 080548), Statement of Decision from Phase I Trial on Petitions for Writ of Mandate, pp. 4-9.)</p>	
<p>Trash receptacles/ Trash excluders</p>	<p>The trash receptacle provisions and the requirement to install trash excluders or equivalent devices in areas not subject to a trash TMDL are unfunded state mandates. The City of Pomona is not able to charge a fee for the installation of trash excluders on “Priority A” catch basins, monies will be taken directly out of the City’s General Fund.</p>	<p>Cities of Signal Hill and Pomona</p>	<p>The Board disagrees. The requirements to place trash receptacles in high trash generation areas or install trash excluders on or in catch basins or outfalls to prevent the discharge of trash to the MS4 or receiving water are within the scope of the MEP standard imposed on MS4 permittees under the Clean Water Act. As already explained, the MEP standard requires flexible, best management practices, to eliminate or reduce the discharge of pollutants in storm water or runoff through MS4s. Without question, the placement and maintenance of trash receptacles at high trash generation areas and the installation of trash excluders will help prevent trash from reaching receiving waters. These requirements are an obvious remedy for a known source of pollutants. In addition, the relevant management practices required under federal law include “practices for operating and maintaining public streets, roads and highways and</p>	<p>None</p>

			<p>procedures for reducing the impact on receiving waters of discharges from municipal storm sewer systems.” (40 C.F.R. § 122.26 (d)(2)(iv)(A)(3).) Thus, because these requirements are within the MEP standard under the mandatory provisions of the Clean Water Act, it is imposed by federal law and, therefore, is not a state mandate.</p> <p>Further, according to USEPA, the trash receptacle requirements are well within the MEP standard. (See Letter dated April 10, 2008; signed by Alexis Strauss, USEPA.) In addition to being required by federal law, the trash receptacle requirements are existing requirements, and thus do not constitute a new program or a program requiring a higher level of service.</p> <p>Lastly, the Los Angeles County Superior Court recently determined that the trash receptacle requirements were clearly within the MEP standard and not unfunded state mandates. (<i>State of Cal. v. County of Los Angeles</i> (Super. Ct. Los Angeles County, 2011, No. BS130730.) This followed a previous determination during the judicial litigation concerning Order No. 01-182 that the terms of Order No. 01-182 were consistent with the MEP standard. (See <i>In re Los Angeles County Municipal Storm Water Permit Litigation</i> (Sup. Ct. Los Angeles County, March 24, 2005, Case No. BS 080548), Statement of Decision from Phase I Trial on Petitions for Writ of Mandate, pp. 4-9.)</p>	
Unfunded State Mandates	The City is concerned with the issue of whether these permit requirements constitute an unfunded mandate claim and believes that this issue should be addressed.	City of Inglewood	The issue has been addressed in the permit, more specifically in the Fact Sheet, and in these responses to comments.	None
Regional	Part XI.A. of the MRP is clearly	City of Vernon	The MS4 is regional in nature and its discharges can	Pyrethroid

Studies	<p>an unfunded mandate. This provision is not part of the federal Clean Water Act; therefore, California Water Code section 13263 requires that the Water Boards consider economic factors described in section 13241 as they apply to these specific restrictions. Why does our MS4 permit require permittees to participate in a pyrethroid study if the pesticide is being banned? Also, the new regulations appear to ban the use of the pesticide in sanitary sewer.</p>		<p>affect water quality region-wide. The objective of the Federal Clean Water Act is to restore and maintain the chemical, physical, and <i>biological</i> integrity of the Nation's waters (CWA section 101(a)). The requirement for Permittees to assess biological impacts of MS4 discharges on receiving waters is consistent with this objective. Biological assessment of receiving waters is necessary to evaluate cumulative effects of multiple pollutants discharged from the MS4.</p> <p>The provisions for regional studies are required and/or authorized by federal law. (CWA section 308(a); 40 CFR sections 122.26(d)(2)(i)(F) and (d)(2)(iii)(D), 122.41(h), (j)-(l), 122.42(c), 122.44(i), and 122.48.) The Board has determined that this provision is necessary to determine compliance with the conditions of this permit and to determine the impacts of the permittees discharges on receiving waters. Therefore, this requirement is not an unfunded state mandate.</p> <p>Although not required, the Board has considered the factors in section 13241 of the Water Code, including costs, in the Fact Sheet. The permit also provides for regional monitoring to allow Permittees to coordinate resources and reduce costs.</p> <p>The pyrethroid regional study requirement has been eliminated. The study requirement has been eliminated in light of new regulations issued by the Department of Pesticide Regulation, which the Board anticipates will significantly reduce discharges of pyrethroids to receiving waters.</p>	Study deleted
Miscellaneous				
General	It is imperative that the Regional Board include strong and enforceable provisions in the	Environmental Entrepreneurs (E2), Malibu Surfing	Comment noted. The permit includes strong and enforceable provisions, while allowing permittees the flexibility to address critical water quality priorities in	None

	<p>region’s new MS4 permit that require compliance with water quality standards set to protect the public health and that will promote important recreational and commercial uses of our waters. The permit should also prioritize use of green infrastructure practices to address stormwater runoff. These practices, which infiltrate, capture and re-use, or evapotranspire runoff at its source, reduce the volume of runoff and pollution that reaches our beaches and inland waters, while potentially replenishing groundwater resources and increasing our local water supplies</p>	<p>Association, Surfrider Foundation</p>	<p>a focused and cost-effective manner that also maintaining the level of water quality protection mandated by the Clean Water Act.</p>	
<p>LACFCD authority</p>	<p>The Los Angeles County Flood Control District (LACFCD) is identified as having to mandate reporting by CWSs. ACWA is unaware of any legal mechanism that the LACFCD currently has to enforce this provision. Further, there are hundreds of potable water sources in Los Angeles County, and it is unclear if the LACFCD would have the resources to implement such a requirement. We believe it would be more appropriate for each individual MS4 Permittee (or perhaps groups of MS4 Permittees through the watershed groups) to be responsible for this function.</p>	<p>ACWA</p>	<p>The language has been revised to require the operator of the MS4 who is receiving the discharge to require reporting.</p>	<p>Language revised.</p>
<p>Responsibility</p>	<p>Municipalities have little or no control over the behavior of</p>	<p>City of Burbank</p>	<p>The Board disagrees. The permittees have ultimate authority and responsibility to prohibit, prevent, or</p>	<p>None</p>

	<p>individuals who may intentionally or inadvertently contribute to storm water pollution through their actions e.g. littering, animal/pet droppings, illegal discharges and illicit connections to the storm drain system. While we believe permittees should institute non-structural and structural controls to prevent or control pollutants to the “maximum extent practicable”, permittees should not be responsible for the actions of which we have no control</p>		<p>otherwise control the non-storm water discharges that enter and exit the portions of the MS4 for which they are owners and/or operators. Even if the permittees do not themselves generate the pollutants entering/exiting their MS4s, the permittees are nevertheless responsible for ensuring that the pollutants do not reach receiving waters through their MS4. As recently stated by the 9th Circuit Court of Appeals, “the Clean Water Act does not distinguish between those who add and those who convey what is added by others - the Act is indifferent to the originator of water pollution.” (<i>NRDC v. County of Los Angeles</i> (2011) 673 F.3d 880, 900.) Thus, the Clean Water Act, and this permit, appropriately places responsibility for preventing or controlling illicit discharges on the permittees.</p> <p>Further, the intent of the Public Information and Participation Program is to provide information to facilitate behavior changes that will reduce/eliminate pollutant generating activities. The Board acknowledges that there is no guarantee that behavior will be modified.</p>	
<p>No Guarantee that Permit will Improve Water Quality</p>	<p>It should also be noted that the draft MS4 permit as currently written will not necessarily lead to improved water quality – for instance, meeting interim or final waste load allocations for a particular Total Maximum Daily Load (TMDL) at the outfall will not necessarily mean the receiving water’s beneficial use criteria are being met – in other words, point sources are not the only source of pollutants and yet this MS4 permit places a great burden on the permittees to meet stringent numeric standards without having</p>	<p>City of Burbank</p>	<p>The Board disagrees and believes the permit will improve water quality, as required by the Clean Water Act.</p>	<p>None</p>

	first assessed the condition of the receiving water/watershed			
General Permit	The permit proposes an extensive list of substantial new requirements without regard for the need to prioritize water quality objectives and municipal resources, without consideration for unique geography and geology, and without credible scientific evidence that the additional requirements will actually achieve a set of prioritized water quality objectives	Peninsula Cities	The permit allows permittees the flexibility to address critical water quality priorities in a focused and cost-effective manner, while also maintaining the level of water quality protection mandated by the Clean Water Act. Permittees can prioritize water quality objectives through development of a watershed management program plan.	None
Permittee Requirements	Section III.A.4.f. Permittee Requirements This condition prohibits discharge “from” MS4. This language should be changed to “to” in order to keep it consistent with Part III.A.4.d.i.	City of Malibu	The language is appropriate as-is.	None
Typographical Error	Section VIII.B Identification of Outfalls with Significant with Non-Storm Water Discharge Please delete the extra “with” in the title (after “Significant”).	City of Malibu	Typographical error was corrected	Language revised.
Typographical Error	Section VIII The numbering is off in this section. Inventory of MS4 Outfalls with Non-Storm Water Discharges should be “C” not “D.” Please revise.	City of Malibu	Numbering was corrected	Language revised.
General	General Comment: The Board may wish to consider using the terms Essential CENSWD and	City of Sierra Madre	The terminology is not necessary and may not increase the clarity of the Section III. Discharge Prohibitions	None

	Non-Essential CENSWD for clarity’s sake. It is difficult to discuss the provision of this permit without some sort of definitive terminology			
General Permit	As this tentative permit is written, all permittees will be in violation of the permit if the receiving water exceeds the numeric effluent limits. There is no real opportunity for individual cities to prove that they did not contribute to the exceedance unless all outfalls, regardless of size, are monitored continuously and simultaneously.	City of Vernon	The Board disagrees. Permittees can demonstrate compliance with RWLs in a number of different manners, including compliance with the schedule and milestones of a watershed management program plan.	None
General Permit	Rrevise the Final NPDES Permit for MS4 Discharges to provide local governments with the flexibility to determine how best to meet the State’s water quality objectives as opposed to a ‘one-size-fits-all’ approach that fails to acknowledge the unique characteristics and environment of cities. We request that requirements in the permit be made to expire if the City demonstrates compliance and achievement of the policy goals and the permit include provisions that focus on cleaning storm water rather than indefinitely monitoring and reporting. The Tentative Permit does not provide a compliance standard that is consistent with other National Pollutant Discharge Elimination	City of Rolling Hills	The Permit does provide the flexibility that this comment calls for through the watershed management program and the monitoring and reporting program which allows permittees the flexibility to address critical water quality priorities in a focused and cost-effective manner that also maintaining the level of water quality protection mandated by the Clean Water Act. Requirements mandated by the Clean Water Act cannot expire, but requirements can evolve; for example from BMP installation to BMP maintenance.	None

	<p>System (NPDES) permits located statewide or within Los Angeles County. For example, the General Construction and Industrial Permits are not held to the Maximum Extent Practicable (MEP) standard. Nor do they contain Numeric Effluent Limits. To that extent, the current and proposed Caltrans Permits also do not contain Numeric Effluent Limits. The Tentative Permit should provide Permittees fair and equal opportunity to achieve compliance.</p>			
<p>Findings</p>	<p>What is the Regional Water Board Watershed Management Initiative? Please provide a copy or link.</p>	<p>City of Santa Clarita Detailed</p>	<p>The Watershed Management Initiative (WMI) is designed to integrate various surface and ground water regulatory programs within the regional water boards, while promoting cooperative, collaborative efforts within a watershed. It is also designed to focus limited resources on key issues and use sound science. For initial implementation of the WMI, each Regional Board identified the watersheds in their Region, prioritized water quality issues, and developed watershed management strategies. These strategies and the State Board's overall coordinating approach to WMI are contained in the Integrated Plan for Implementation of the WMI which is updated as needed. In following years, the Regional Boards have continued to build upon their early efforts to utilize this approach. The full version of our WMI Chapter, including permit lists, is available on the Board's website; it outlines the Board's ongoing efforts to continue implementation of the WMI. Any questions about the WMI can be directed to the Watershed Coordinator, Shirley Birosik, Staff Environmental Scientist, at sbirosik@waterboards.ca.gov.</p>	<p>None</p>

Green Streets Reference	<p>The website link provided for the Green Infrastructure Green Streets guidance was not sufficient to locate the document. Please confirm that this is the document that is referenced, and if not, clarify which is the intended reference:</p> <p>Managing Wet Weather with Green Infrastructure, Municipal Handbook: Green Streets. Prepared by: Robb Lukes, Christopher Kloss, Low Impact Development Center. December 2008 EPA-833-F-08-009</p> <p>Please provide a more effective reference for the USEPA guidance document on Green Streets than a website link by referencing exact document title, authors, year of publication and USEPA document ID number.</p>	Peninsula Cities Detailed	<p>Managing Wet Weather with Green Infrastructure Municipal Handbook Green Streets prepared by Robb Lukes Christopher Kloss Low Impact Development Center The Municipal Handbook is a series of documents to help local officials implement green infrastructure in their communities. December 2008 EPA-833-F-08-009</p>	References have been included.
Effluent Limitations	<p>Assume this does not conflict with A.2. Water quality-based limits (WQBELs) for when there is a TMDL numerical standard. But when there is no such numerical standard for a pollutant, then if we are doing BMPs, are we safe from any Board or 3rd party lawsuit? Do Basin Plan standards supersede BMP MEP and follow the WQBELs?</p>	City of Santa Monica	The Watershed Management Program option has been revised to clarify Permittee's requirements in complying with receiving water limitations.	Language revised.
IV.A.2	Revise "a." to read, "Each Permittee shall comply with applicable WQBELs as set forth in	City of Torrance	The language is appropriate as written.	None

	Part VI.E of this Order, pursuant to applicable BMP implementation schedules included in approved Watershed Management Program(s)			
Design Storm	The Tentative Permit fails to establish or define a compliance storm event for wet weather compliance. It is irresponsible for the LARWQCB to compel Permittees to comply with Numeric Effluent Limits at all costs and without any consideration of a storm event's magnitude.	City of Vernon	The permit has been revised to allow Permittees to develop an enhanced Watershed Management Program that maximizes retention of the 85 th percentile, 24 hour storm within a watershed. Where permittees elect to implement such a program, compliance determination may be based on a permittees full compliance with the approved enhanced Watershed Management Program that retains all of the storm water from the 85 th percentile, 24 hour storm event. Where retention is infeasible, Permittees may propose other BMPs and demonstrate through a Reasonable Assurance Analysis that the BMPs will be sufficient to achieve applicable WQBELs and ensure that MS4 discharges will not cause or contribute to exceedances of receiving water limitations.	Revisions made.
Sampling	Because of the dynamic variability of stormwater and non-stormwater discharges, the City of Vernon would like an opportunity to witness and/or acquire duplicate samples during any RWQCB, SWRCB, or US EPA sampling operations. In addition, if sampling operations will be performed on City of Vernon property, an encroachment permit is required prior to sampling activity. Proposed Solution- Staff (or duly authorized representatives) of the RWQCBs, SWRCB, and US EPA	City of Vernon	The City can collect duplicate samples during Board sampling. However, an encroachment permit is not necessary and 72-hour notification may not be practical given the dynamic variability of stormwater as the commenter stated.	None

	shall obtain proper encroachment permits in addition to providing a minimum of 72-hour notification to the appropriate Permittees Stormwater Program Manager prior to any sampling operations within the jurisdiction of the Permittee.			
General	We question the accessibility and use of current scientific data for the areas presented. How were measurements taken, at what source points and at what intervals.	Joyce Dillard	Monitoring reports are normally submitted annually and detail not only monitoring methods but also frequency and location. Monitoring reports are available either from the Regional Water Board or the permittees themselves.	None
General	Is monitoring only to be taken into receiving waters or are outfalls more important in this permitting.	Joyce Dillard	Monitoring will occur both in the receiving water and at the outfall depending on the discharge being monitored.	None
General	How do you determine if the permittee caused action into receiving waters if other permittees, such as Caltrans, may hold some responsibility. Is it location, location, location.	Joyce Dillard	Permittees may demonstrate compliance with the receiving water limitations provisions through either outfall monitoring or receiving water monitoring. The permit also provides various ways that permittees can demonstrate compliance, such as providing evidence that the permittee did not discharge.	None
General	How are effluent maximums determined without any consideration to the General Plans and the Land Uses.	Joyce Dillard	All known sources are identified in the TMDLs when determining loads. Generally, sources are determined by various factors including land uses, area, and monitoring data. General Plans and Land Uses information are important sources of information that the Regional Board utilizes in determining source loadings.	None
General	Even now, a Public Facilities land use designation may be multi-family housing with a commercial mixed use aspect such as with School property.	Joyce Dillard	The Board does not understand how this land use designation has bearing on the permit.	None
General	How can BMPs be determined to be effective without the proper planning, mapping, identification,	Joyce Dillard	BMPs are determined by the permittees. Permittees utilize all their resources to determine the best BMPs to address the sources and best utilize their funds.	None

	listing of grandfathered properties and such.		BMP development is a dynamic process, and the menu of BMPs may require changes over time as experience is gained and/or the state of the science and art progresses.	
General	What is the state of the underground infrastructure as required in the Circulation Element. You do not ask for the state mandated requirements for Public Health and Safety issues.	Joyce Dillard	The Board does not understand this comment and cannot respond to it.	None
General	You have no requirements for weather reporting and history which is what stormwater is all about.	Joyce Dillard	Contrary to the comment, many monitoring requirements revolve around storm events and reporting of rainfall data representative of the watershed and monitoring location is required.	None
General	With that, how is sediment management incorporated into limitations.	Joyce Dillard	Sediment is a key pollutant carrier and is taken into account into many TMDLs.	None
General	How are fires incorporated into the limitations.	Joyce Dillard	If the commenter is referring to water discharged during firefighter activities, that is taken into account in the non stormwater discharges section.	None
General	Watershed Management Areas may really be under the jurisdiction of municipalities who grant permits and entitlements and not under LA County's control.	Joyce Dillard	The permit does not assert that watershed management areas are under the control of Los Angeles County.	None
General	This is where you are voiding CEQA and not allowing the public to participate and comments on issues of importance to their persons and their property.	Joyce Dillard	An action to adopt an NPDES Permit is exempt from the provisions of Chapter 3 of the CEQA pursuant to California Water Code section 13389. (<i>County of Los Angeles v. Cal. Water Boards</i> (2006) 143 Cal.App.4th 985.) Further, both permittees and the public had ample opportunities to participate in the development of this permit reissuance including several workshops and opportunities to provide comments since May 2011.	None
General	The County Flood Control District is planning a vote-of property owners not of registered voters, to assess a parcel fee for Watershed	Joyce Dillard	Assembly Bill 2554 is not under the control of the Regional Water Board. Comments regarding this possible funding source should be directed to the Los Angeles County Flood Control District or the Los	None

	<p>Management Areas and their governance. Property owners include corporations and government agencies. There is no vote of the People for elected representatives. The bill will go to the property owner, in perpetuity, for requirements not well planned and documented.</p> <p>This disconnection will never achieve the reduction of pollutants into receiving waters because a financial aspect of mitigation banking will be created as offsets.</p>		Angeles County Board of Supervisors.	
General	Not considered is the geology and soils, practices like fracking which the State Department of Oil, Gas and Geothermal DOGGR does not regulate, and remaining oil deposits, methane and other hazardous gases. No one knows the content of the fracking fluid that enters the system.	Joyce Dillard	This is beyond the scope of the permit. Fracking and oil development are addressed in other industrial permits.	None
General	This agency is just too myopic in its scope of the problem.	Joyce Dillard	The commenter does not detail why she believes the Regional Board is myopic.	None
General	This is a developers dream-no CEQA, no source point identification, no responsibility but to the taxpayer.	Joyce Dillard	This permit incorporates several MCMs upon new development and construction including Low Impact Development and on site infiltration strategies. There is a non stormwater discharges section in the permit. The commenter doesn't detail why she believes these requirements are not satisfactory.	None
General	This is a contractors dream-projects without any required proof of productivity and benefit.	Joyce Dillard	The comment does not appear to comment on any portion of the permit. The Board does not understand this comment and therefore cannot respond.	None
General	This is a oil company's dream because there is no oversight and accountability as to the use of	Joyce Dillard	Oil companies are not regulated by this permit. As previously stated, oil companies are regulated under other various industrial permits that are beyond the	

	water and its wasteproducts.		scope of this permit.	
General	Is there any consideration for birds, fish and wildlife. Or water-born diseases that could kill out industries if mishandled?	Joyce Dillard	Yes, these are incorporated into the beneficial uses of waterbodies. If a waterbody is impaired, a TMDL is created to address these problems.	None
General	Have you considered tidal flows and the Southern California Bight geography.	Joyce Dillard	Tidal flows and geography are taken into account in all of the beach, harbor, and estuary related TMDLs.	None
General	These generic methods of Best Management Practices BMPs need to be revised.	Joyce Dillard	The commenter does not detail what she finds inadequate regarding the BMP section of the permit.	None
General	You should be working with the Governor's Office of Planning and Research and create an effective system with measurable and documented results. This process should involve more than just one State agency.	Joyce Dillard	The Regional Board believes that the MS4 permitting system in place is and will continue to be effective with measurable and documented results. The commenter does not illustrate why she believes other State agencies like the Governor's Office of Planning and Research would improve the permitting process.	None

**California Regional Water Quality Control Board, Los Angeles Region
 Los Angeles County MS4 Permit
 Supplementary Response to Comments on the Tentative Order
 MINIMUM CONTROL MEASURES MATRIX**

Section/Topic	Comment	Commenter(s)	Response	Change Made
<i>Provisions</i>				
	<p>Extensive monitoring studies conducted by CDPH between 1999 and 2011 have documented that mosquitoes opportunistically breed in structural stormwater Best Management Practices (BMPs), particularly those that hold standing water for over 96 hours. These structures create a potential public health concern and increase the burden on local vector control agencies that are mandated to inspect for and abate mosquitoes and other vectors within their jurisdictional boundaries. These unintended public health consequences can be lessened when structures incorporate design, construction, and maintenance principles developed specifically to minimize standing water available to mosquitoes while having negligible effects on the capacity of the BMPs to provide water quality improvements as intended.</p>	<p>CDPH</p>	<p>Appendix H includes technical specifications for LID BMPs, including criteria for Bioretention and Biofiltration BMPs to drain below the planting soil in less than 48 hours and completely drain in less than 96 hours. See Attachment H, Part 2.a.</p> <p>Additionally, Appendix H includes technical specifications for rainwater harvesting, including that harvested rainwater is stored in a manner that precludes the breeding of mosquitoes or other vectors or with a draw down not to exceed 96 hours. See Attachment H, Part 4.d.</p>	<p>No change made.</p>

Section/Topic	Comment	Commenter(s)	Response	Change Made
	<p>It is critical that the capacity for vector control agencies to apply public health pesticides to MS4s is protected by not imposing additional restrictions. To this end, public health pesticides specifically should be included as exempted discharges into permitted MS4s.</p>	<p>CDPH</p>	<p>The discharge of biological and residual pesticides to waters of the US from larvicide and adulticide applications for vector control may pose a threat to existing and potential beneficial uses of waters of the US if not properly controlled and regulated. The Clean Water Act (CWA), at section 301(a), broadly prohibits the discharge of any pollutant to waters of the US, except in compliance with an NPDES permit. Biological and residual pesticides discharged into surface waters constitute pollutants within the meaning of the CWA even if the discharge is in compliance with the registration requirements of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). Therefore, coverage under an NPDES permit is required. The draft tentative order does not prohibit authorized non-storm water discharges separately regulated by an individual or general NPDES permit. Discharges of biological and residual pesticides to waters of the US are covered under WQ Order No. 2012-0003-DWQ. A categorical exemption for these types of discharges to the LA County MS4 would be contrary to the CWA and implementing regulations.</p>	<p>No change made.</p>

Section/Topic	Comment	Commenter(s)	Response	Change Made
	<p>CDPH respectfully requests that the Board strongly consider the addition of specific and concise language to the Draft Tentative Order, <u>Order No. R4-2012-XXXX</u>, that:</p> <ul style="list-style-type: none"> • draws attention to the potential unintended consequences associated with stormwater management structures (i.e., mosquito production); specifically, structural BMPs and certain Low Impact Development (LID) site design measures such as rainwater capture systems • requires that MS4s operating under this NPDES General Permit minimize the potential for mosquito production in structural BMPs and certain LID site design measures capable of holding standing water to the maximum extent practicable • requires that MS4s operating under this NPDES General Permit provide, on an annual basis, a list of structural BMPs and certain LID site design measures capable of holding standing water to the local vector control agency to facilitate routine inspections and control of vectors if necessary, and 		<p>The Tentative order requires that LID and Hydromodification Control BMPs are properly selected, designed and maintained to avoid the breeding of vectors. See Part VI.D.6.a.i.(6).</p> <p>The Tentative order addresses drainage criteria for bioretention and biofiltration BMPs in Attachment H. As proposed, these criteria are consistent with the <i>California Department of Public Health. (2012). Best Management Practices for Mosquito Control in California</i>, which indicates that structures designed to drain captured water within 96 hours minimize the potential for breeding vectors.</p> <p>The Tentative order also requires MS4 Permittees</p> <ul style="list-style-type: none"> • to coordinate with other agencies as necessary to successfully implement the provisions of the order (see Part VI.A.4.a.iii), and • to implement a tracking system for new development and re-development post-construction BMPs. This tracking system will contain information on the types and locations of post-construction BMPs. This information could be made available by MS4 Permittees to vector control agencies, upon request. See Part VI.D.6.d.iv. 	<p>No change made.</p>

Section/Topic	Comment	Commenter(s)	Response	Change Made
	<p>The April 27, 2012 revision to the Fact Sheet for NPDES Permit No. CAS000003 ORDER No. 2012-XX-DWQ, State of California Department of Transportation included a paragraph on page 18 entitled <i>Potential Unintended Public Health Concerns Associated with Structural BMPs</i>. We propose that the Board consider the addition of a similar paragraph to the Fact Sheet of the Tentative Draft Order for the purpose of raising awareness of the potential unintended consequences associated with the implementation of certain stormwater management structures and public health obligations of owner /operators as defined in the California Health and Safety Code.</p>	CDPH	<p>Staff revised the Fact Sheet to include the following language: <i>Monitoring studies conducted by the California Department of Public Health (CDPH) have documented that mosquitoes opportunistically breed in structural storm water Best Management Practices (BMPs), particularly those that hold standing water for over 96 hours. Certain Low Impact Development (LID) site design measures that hold standing water such as rainwater capture systems may similarly produce mosquitoes. BMPs and LID design features should incorporate design, construction, and maintenance principles to promote drainage within 96 hours to minimize standing water available to mosquitoes. This Order requires regulated MS4 Permittees to coordinate with other agencies necessary to successfully implement the provisions of this Order. These agencies may include CDPH and local mosquito and vector control agencies on vector-related issues surrounding implementation of post-construction BMPs.</i></p>	Language in the Fact Sheet revised to incorporate suggested language.
	<p>The reference cited in Section 6.a.i.(6) in the footnotes should be updated. Please replace it with the following</p> <p>²⁶ <i>Structures designed to drain captured water within 96 hours minimize the potential for breeding vectors. See California Department of Public Health, Best Management Practices for Mosquito Control in California (2012) at http://www.westnile.ca.gov/resources.php</i></p>	CDPH	Staff has revised the footnote to reflect the more recent reference.	Order revised.
	<p>A large portion of Statewide and Regional stormwater NPDES permits have incorporated a Finding related to the potential for vector production in certain structural stormwater structures. Such a Finding ensures that Permittees are fully aware that certain stormwater structures unintentionally may produce vectors, particularly mosquitoes, and encourages collaboration with public health agencies that control vectors to mitigate any breeding that may occur. Please consider including the following language as a separate Finding and the associated reference as a footnote.</p>	CDPH	<p>The draft tentative order addresses this issue in several places in Part VI.D.6 and Attachment H. Additionally staff revised the Fact Sheet to include language regarding this issue. The Fact Sheet constitutes part of the findings of the Los Angeles Water Board for this Order. See Finding I.</p>	Language in the Fact Sheet revised.

Section/Topic	Comment	Commenter(s)	Response	Change Made
FIFRA Regulated Discharges	<p>The management of vector populations and public health has become increasingly difficult with the inclusion of additional regulations under NPDES. We fully support the vector related language proposed for inclusion in the above tentative Order by the California Department of Public Health (CDPH). In addition to the CDPH suggestions we would like the Board to address the following concerns:</p> <ul style="list-style-type: none"> The additional burdens on vector control agencies created by the 2011 Statewide NPDES Permit (Water Quality Order No. 2011-0002-DWQ, General Permit No. CAG 990004) directly impact the efficiency of field operations to control vector mosquitoes. Consequently, both the statewide as well as the national mosquito control association are aiming to regain NPDES exemption of public health pesticide applications and return such applications solely to regulation under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). To ensure our ability to continue our control efforts in the future, we would like to see the language under section VI.A 	San Gabriel Valley Mosquito and Vector Control District, and Greater Los Angeles County Vector Control District	<p>Comment Noted. The proposed Order is based on laws and policy in effect at the time of permitting. If future legislation or court decisions affect components of the permit, the Order may subsequently be reopened for review and modification, if necessary.</p> <p>The Regional Water Board staff agrees to include language similar to that included in the Ventura County MS4 Permit in the Fact Sheet of the Tentative Order, as follows: <i>This Order is not intended to prohibit the inspection for or abatement of vectors by the State Department of Public Health or local vector agencies in accordance with CA Health and Safety Code, § 116110 et seq. and Water Quality Order No. 2012-0003-DWQ.</i> However, the Regional Water Board staff believes that the Provision VI.A.10 is important and that the draft tentative order is clear in that pesticide applications that are currently authorized by an NPDES permit are allowed within the Proposed Order.</p>	Suggested language added to Attachment F, Part IV.A.5

Section/Topic	Comment	Commenter(s)	Response	Change Made
	<p>10. “prohibiting the discharge of any product registered under FIFRA to any waste stream that may ultimately be released to waters of the United States, unless specifically authorized elsewhere in this Order or another NPDES permit”, removed or have a specific exemption of public health pesticides added.</p> <ul style="list-style-type: none"> We find that while it has been stated that the existing Ventura County Municipal Separate Storm Sewer System Permit, Order No. 09-0057, NPDES Permit No CAS004002 has served as a template in crafting this tentative order, important vector control related language has been omitted in this draft. We ask that the Board consider including the following language from the FINDINGS section F of the Ventura County MS4 permit as a part of the language proposed by CDPH for this section: <p><i>This Order is not intended to prohibit the inspection for or abatement of vectors by the State Department of Public Health or local vector agencies in accordance with CA Health and Safety Code, § 116110 et seq. Certain Treatment Control BMPs if not properly designed, operated or maintained may create habitats for vectors (e.g. mosquitoes and rodents).</i></p>			

Section/Topic	Comment	Commenter(s)	Response	Change Made
Low Impact Development	Page 70, section VI.D.6.c.ii.(1) should be revised to, “In instances of technical infeasibility or where a project has been determined to provide an opportunity to replenish regional ground water supplies at an offsite location where ground water can be used for beneficial purposes, each Permittee may...”	US EPA	The Board agrees and will include the language consistent with the suggestion.	Changes made to Order.
Low Impact Development	Page 71, section VI.D.6.c.ii.(2)(d) should be revised to, “Brownfield development sites where infiltration poses a risk of causing pollutant mobilization.”	US EPA	The Board agrees that the circumstances where technical infeasibility exists due to a risk of creating pollutant mobilization should be clarified.	Changes made to Order.
Low Impact Development	There are three documents cited on page F-62 of the fact sheet where a reference citation was not included – the study by “Hawley et al.”, the USGS study and the Grand River TMDL. We suggest footnotes which would provide the reference information.	US EPA	The Fact Sheet has been revised to include the citations for the references, including: Hawley, 2011. “Effects of Urbanization on the Hydrologic Regimes and Geomorphic Stability of Small Streams in Southern California”; Cuffney, T.F., Brightbill, R.A., May, J.T., and Waite, I.R. 2010. Responses of Benthic Macroinvertebrates to Environmental Changes Associated with Urbanization in Nine Metropolitan areas, <i>Ecological Applications</i> , 20(5): 1384–1401; Ohio EPA, Grand River (lower) TMDL http://www.epa.ohio.gov/portals/35/tmdl/LowerGrand_PN_Report.pdf	Changes made to Fact Sheet.

**California Regional Water Quality Control Board, Los Angeles Region
 Los Angeles County Municipal Storm Water Discharge Permit
 Response to Comments on the Tentative Order
 US EPA COMMENTS on TMDL and WMPs PROVISIONS**

Section/ Topic	Comment	Commenter	Response	Change Made
Watershed Management Programs (WMPs)	We found no mention of public review of WMPs in the fact sheet, and we recommend this be mentioned and stressed to ensure the public is fully aware of this opportunity and to encourage public review. For example, page F-40 of the fact sheet notes that a draft WMP must be submitted to the Board for approval within one year of adoption of the permit, but no mention is made of any opportunity for public review and comment.	US EPA	The Watershed Management Plans are subject to public review and the fact sheet will be revised to encourage public participation in reviewing the WMPs.	Change made to fact sheet

Section/ Topic	Comment	Commenter	Response	Change Made
Total Maximum Daily Load Requirements	<p>EPA further supports language concluding that if the Board determines a plan or schedule is inadequate, then compliance with the numeric WLAs and water quality objectives, as defined in the TMDL, must be met immediately. We believe such provisions will best assure water quality improvements. To reinforce the permit expectations as we understand them, we'd suggest the following specific changes:</p> <p>Page 114, section VI.E.3. next to last sentence should be revised to "In lieu of inclusion of numeric water quality based effluent limitations at this time, this Order requires the Permittees subject to WLAs in USEPA established TMDLs to propose and implement best management practices (BMPs) that will be effective in achieving compliance with USEPA established numeric WLAs."</p>	US EPA	The Board agrees that permit expectations should clearly delineate the compliance determination mechanism should Watershed Management Program or schedule be determined to be inadequate.	Changes made to Order.

Section/ Topic	Comment	Commenter	Response	Change Made
Total Maximum Daily Load Requirements	Page 115, section VI.E.3.c.iii. should be revised to: “A detailed time schedule of specific actions the Permittee will take in order to achieve compliance with the applicable WLAs.”	US EPA	The Board agrees and will revise the Order.	Changes made to Order
Watershed Management Program	Page 51, Section VI.C.3.b. iv.(1)(c) should be revised to: “If the Permittee(s) elects to eliminate a control measure identified in Part VI.D.4 to Part VI.D.9 because that specific control measure is not applicable to them, the Permittee(s) shall provide a justification for its elimination.”	US EPA	The Board agrees that the specific provisions provided by US EPA are appropriate and has revised the Order accordingly.	Changes made to Order
Watershed Management Program	Page 55, Section VI.C.6.b.ii. should be revised to clarify that the reference to modifying compliance deadlines or interim milestones does not apply to deadlines or milestones associated with TMDLs, but rather applies to new deadlines and milestones that are not including in this permit, but are developed pursuant to the Permittee(s)’ Watershed Management Program.	USEPA	The Board agrees and has clarified this provision.	Changes made to Order

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**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

**Los Angeles, California
November 8, 2012
562nd Board Meeting**

- Item:** 9
- Subject:** NPDES Permit for Municipal Separate Storm Sewer System (MS4) Discharges within the Coastal Watersheds of Los Angeles County, with the exception of discharges originating from the City of Long Beach (NPDES Permit No. CAS004001)
- Purpose:** Continuation of public hearing to consider reissuance of the revised tentative NPDES permit for MS4 discharges within the Coastal Watersheds of Los Angeles County, with the exception of discharges originating from the City of Long Beach. The existing Los Angeles County MS4 Permit was issued in 2001 and expired in 2006. That permit has been administratively extended. The purposes of this item is to issue a new NPDES permit for MS4 discharges within the coastal watersheds of Los Angeles County, with the exception of discharges originating from the City of Long Beach, to reflect the best science and lessons learned in storm water and non-storm water management over the past eleven years and to meet current regulatory requirements, which include incorporating provisions to implement waste load allocations from 33 TMDLs. A new Los Angeles County MS4 permit will provide improvements in storm water and non-storm water management and opportunities for efficiencies in regulating discharges from the MS4 to improve water quality. Enhancements to water quality will have a positive impact on beneficial uses, including recreation, habitat, and water supply.

At the November 8 hearing, staff will begin the hearing by providing an overview of the key revisions made to the tentative permit released for public comment on June 6, 2012. Parties and interested persons will have the opportunity to make oral comments only with respect to the revisions made to the tentative order released for public comment on June 6, 2012, as reflected in track changes format in the Revised Tentative Order circulated on October 18, 2012 and the Second Revised Tentative Order circulated on November 5, 2012. Once oral comments are completed, the Board will then have an opportunity to ask questions of Board staff, parties, and the public, and then deliberate. The Board will be asked to take action at the conclusion of the hearing.

Background:

In 1987, Congress amended the Clean Water Act to bring discharges from MS4s under the NPDES program. USEPA has identified discharges of pollutants in storm water and non-storm water as one of the most significant sources of water pollution in the country and a serious threat to aquatic life and habitat as well as to human health. The MS4s within Los Angeles County is a large interconnected system and is used by the Los Angeles County Flood Control District, Los Angeles County, and multiple cities within Los Angeles County. These systems convey storm water and non-storm water across municipal boundaries where it is often commingled within the MS4 and then discharges to a receiving water body.

The requirements of the tentative MS4 permit apply to the Los Angeles County Flood Control District, the unincorporated areas of the County of Los Angeles, and 84 incorporated cities (Permittees) within the County of Los Angeles with the exception of the City of Long Beach. The Permittees discharge storm water and non-storm water from their MS4s, also called storm drain systems, within the Los Angeles County coastal watersheds of the Santa Clara River, Malibu Creek, Ballona Creek, Los Angeles River, San Gabriel River, Los Cerritos Channel, Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters and Santa Monica Bay.

The tentative permit is a single system-wide permit with some sections devoted to universal requirements for all permittees and others devoted to requirements specific to each major Watershed Management Area (WMA), including TMDL implementation provisions. This structure is supported by section 402(p) of the Clean Water Act and 40 CFR section 122.26, subdivisions (a)(1)(v) and (a)(3)(ii). A single permit ensures consistency and equitability in regulatory requirements within the County, while watershed-based sections within the single permit will provide flexibility to tailor permit provisions to address distinct watershed characteristics and water quality issues. Additionally, an internal watershed-based structure comports with the Regional Board's watershed-based TMDL requirements and the LACFCD's funding initiative passed in Assembly Bill 2554.

The Clean Water Act and federal regulations require that NPDES permits for MS4 discharges include: (1) a requirement to effectively prohibit non-storm water discharges into the MS4; (2) controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design, and engineering methods; (3) such other provisions as the Regional Board determines appropriate for the control of such pollutants; (4) effluent limitations consistent with the assumptions and requirements of all available waste load allocations from TMDLs applicable to the discharges; and (5) provisions for monitoring and reporting. With regard to controls to reduce

the discharge of pollutants to the maximum extent practicable, Permittees are required to develop and implement a storm water management program (SWMP) per 40 CFR section 122.26(d)(2)(iv).

The tentative permit includes provisions requiring compliance with water quality standards in Part V – Receiving Water Limitations. The language used in this section is existing language from the 2001 Permit, which is required by State Board Order No. WQO 99-05. Numeric water quality based effluent limitations consistent with available WLAs are included in Part VI.E and Attachments L through R. Provisions to effectively prohibit non-storm water discharges of pollutants to receiving waters are included in Part III. Requirements regarding storm water management programs and “minimum control measures” are included in Part VI.D. Monitoring and reporting provisions are included in Part VI.B and Attachment E of the Tentative Order. The rationale for each of these provisions is provided in Attachment F (Fact Sheet) to the tentative permit.

Key permit provisions include: (1) requirements to implement low impact development for new development and significant redevelopment to control pollutant loads and runoff volume to receiving waters; (2) provisions consistent with the assumptions and requirements of 33 TMDL waste load allocations; (3) provisions allowing Permittees the opportunity to develop and implement Watershed Management Programs (including an enhanced Watershed Management Program) as a means of complying with a number of permit requirements in a more integrated and efficient fashion; and (4) requirements for outfall monitoring as well as receiving water monitoring to determine compliance with permit provisions and the impact MS4 discharges have on receiving water quality.

**Permit
Development
Process:**

Staff has made extraordinary efforts to provide opportunities for stakeholder participation during the permit development process. Staff began development of the new LA County MS4 Permit in May 2011. Since that time, countless opportunities have been provided for Permittees to raise concerns, ask questions, and engage in dialogue with Board staff regarding permit provisions.

Five staff-level workshops were held on May 25, 2011, December 15, 2011, January 23, 2012, March 1, 2012, and July 9, 2012. Three board-level workshops were held on November 10, 2011, April 5, 2012, and May 3, 2012. A Board member field tour was also conducted on July 31, 2012. Board staff has also met regularly with representatives of the LA Permit Group (which represents 62 Permittees), the Los Angeles County Flood Control District, Los Angeles County, the City of Los Angeles, and environmental organizations. Board staff has also met with other

stakeholders, including representatives of the Building Industry Association, water suppliers, and local fire departments.

Additionally, as directed by the Board, Board staff organized and facilitated four meetings¹ over a two-month period from May to July 2012 among key LA County MS4 interests, including steering committee members of the LA Permit Group, Los Angeles County Flood Control District, County of Los Angeles, City of Los Angeles, Heal the Bay, NRDC and Los Angeles Waterkeeper (previously Santa Monica Baykeeper). The purpose of these meetings was to identify common issues and work toward possible consensus on how to address these issues in the permit. The group was able to find consensus on one key issue regarding how to incorporate USEPA established TMDLs in the permit; this consensus approach is reflected in the tentative permit.

Board staff also recognized the value of providing Permittees and other interested stakeholders with working proposals of the permit prior to issuing the tentative permit. Therefore, Board staff released working proposals for the five primary sections of the permit for review and written comment. For each, a three-week written comment period was provided as well as the opportunity to present comments orally at a board workshop. Specifically, Board staff provided the following working proposals and comment opportunities, as summarized in the table below.

<i>Permit Part</i>	<i>Release Date</i>	<i>Comment Period</i>	<i>Board Workshop Date</i>
Storm Water Management Program Minimum Control Measures (Part VI.D)	3/21/2012	3/21/2012–4/13/2012	4/5/2012
Non-Storm Water Discharge Prohibitions (Part III)	3/28/2012	3/28/2012–4/18/2012	4/5/2012
Receiving Water Limitations (Part V)	4/23/2012	4/23/2012–5/14/2012	5/3/2012
Watershed Management Programs (Part VI.C)	4/23/2012	4/23/2012–5/14/2012	5/3/2012
Total Maximum Daily Load Provisions (Part	4/23/2012	4/23/2012–5/14/2012	5/3/2012

¹ Held on May 17, 2012, May 31, 2012, June 14, 2012, and July 9, 2012.

VI.E)			
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The draft tentative permit was revised to address many of the written and oral comments that staff received on the working proposals. The tentative permit that was released for public comment on June 6, 2012 reflected these changes. Written comments on the tentative permit were due on July 23, 2012.

On October 4-5, the Regional Water Board held a public hearing on the tentative permit released for public comment on June 6, 2012. During the hearing, staff provided an overview of the tentative permit and a summary and response to significant comments received. Permittees, interested parties and the public provided extensive testimony on the tentative permit. Staff also provided the Board and interested parties insight into further staff-proposed changes that were in the works as a result of oral and written comments, as well as extensive continuing discussions with stakeholders. The Regional Water Board did not formally act on the tentative permit at this hearing, but asked questions of staff and stakeholders and provided input based on staff's presentation and comments received.

After the October 4-5 hearing, staff continued to meet with Permittees and interested persons, including environmental groups, to discuss their comments and possible revisions to the tentative permit. Staff also circulated responses to written comments and a Revised Tentative Order. The Revised Tentative Order included revisions that were made as a result of written and oral comments received by the Board and/or staff, including oral comments made during the public hearing held on October 4-5.

Since circulating the Revised Tentative Order, staff again continued to meet with permittees and interested persons to discuss the Revised Tentative Order. As a result of these discussions, on November 5, 2012, Board staff circulated a Second Revised Tentative Order reflecting proposed additional changes to the Revised Tentative Order for the Board's consideration on November 8, 2012. These additional changes also included revisions to provide greater clarification, ensure consistency throughout the permit, and to correct inadvertent omissions and/or typographical or grammatical errors. To assist the Board and the public in identifying these changes, the additional changes in the Second Revised Tentative Order are reflected in track changes format on a "clean" version of the Revised Tentative Order previously provided to the Board.

During its presentation at the hearing, staff will go through and explain the key revisions that were made since the tentative permit was released for public comment on June 6, 2012. Key revisions made since June 6, 2012 are also described below.

Written Comments: Over one-hundred comment letters were received, including letters from Los Angeles County Flood Control District, County of Los Angeles, City of Los Angeles, other cities within the County of Los Angeles, cities and other entities outside of Los Angeles County, a joint letter from NRDC, Heal the Bay and Los Angeles Waterkeeper, the Building Industry Association of Southern California and Construction Industry Coalition on Water Quality, academia, consultants, fire departments, vector control agencies, water suppliers, USEPA, and private citizens. All timely comment letters were included in the Board's October 4-5, 2012 agenda package electronically on a CD. Additionally, a total of 2,229 members of the public and six local businesses submitted form letters, postcards, and signed a petition via Change.org in support of the issuance of a new LA County MS4 Permit. A sample of each of these form letters and lists of the individuals that submitted them were provided in the Board's October 4-5, 2012 agenda package electronically on a CD. The CD was provided behind tab 8-3.

Board staff evaluated the written comments and provided responses. As appropriate, staff incorporated changes into the tentative permit as a result of the written comments.

Key Revisions: In response to written and oral comments received by the Board and/or staff, including oral comments made during the public hearing held on October 4-5, staff has revised the tentative permit that was released for public comment on June 6, 2012. As explained above, staff will go through and explain the key revisions that were made since the tentative permit was released for public comment on June 6, 2012. These key revisions include:

Application of Watershed Management Program to non-TMDL pollutants:

The tentative permit allows permittees to develop watershed management programs to prioritize and appropriately focus their resources on addressing water quality issues within specific watersheds. The benefits of watershed programs are well documented, based on sound science, and can be cost effective relative to costs to address water quality issues on a jurisdictional basis. Watershed approaches allow municipalities to pool resources to address the highest water quality issues on a watershed basis. The watershed management program requires permittees to develop milestones for planning and BMP implementation to address TMDLs and other water quality issues. These plans would be reviewed and approved/disapproved by the Board or by the Executive Officer. The tentative permit incentivized permittees to develop watershed management programs by setting forth a compliance mechanism that is linked to receiving water limitation provisions in Part V of the tentative permit.

That compliance mechanism deems permittees in compliance with the “Receiving Water Limitations” provisions and the interim TMDL schedules as long as permittees implement their watershed management programs according to a schedule of implementation actions that the permittees develop and submit to the Regional Board for approval.

In the tentative permit released for public comment on June 6, 2012, the compliance mechanism in the watershed management program was limited to pollutants and waterbodies that were subject to approved TMDLs. Many permittees commented that there are pollutant-waterbody combinations that are not subject to TMDLs that should also be addressed through the compliance mechanism in the watershed management program. Permittees noted that if the watershed management program was not available for non-TMDL pollutant-waterbody combinations, Permittees would not be able to effectively develop watershed management program plans, as their resources could be significantly diverted to addressing waters where non-TMDL pollutants are exceeding Receiving Water Limitations and away from addressing interim steps needed to comply with TMDL schedules. Permittees also commented that unless non-TMDL pollutant-waterbodies were allowed to be addressed through the watershed management program, they could be subject to enforcement by the Regional Board or by third parties. Permittees also noted that many of the BMPs that will be implemented under the watershed management program will also address the non-TMDL pollutants because they are chemically similar to the TMDL constituents.

To examine the realities of these comments, Regional Board staff evaluated the Receiving Water Exceedance reports submitted by permittees dating back to 2002. Board staff found that the exceedances were generally either consistent and frequent or random and infrequent. An example of a persistent and frequent constituent is bacteria (i.e., total coliform), and an example of a random and infrequent constituent is selenium. Although staff acknowledge that permittee actions will need to be implemented in order to address all water quality exceedances, staff do not want the permit to facilitate a focus on sporadic exceedances that are often of lesser priority (but may consume a lot of resources) rather than those regulated under TMDLs. Board staff agree that actions to address TMDL constituents and the watershed planning could also effectively address non-TMDL pollutant waterbody combinations. Consequently, staff revised the tentative permit to extend the compliance mechanism in the watershed management program to apply to non-TMDL pollutants.

While the permittees largely support the watershed management program provisions in the revised tentative permit, the non-governmental agencies (NGOs) largely oppose the expanded program reflected in the revised tentative permit. They argue that the revised provisions could allow

degradation of “pristine” waterbodies. Staff disagree that extending the watershed management program to non-TMDL pollutant-waterbody combinations will degrade waterbodies as the revised tentative permit does not authorize new municipal practices that would add more pollutants to or from the MS4s. In fact, the collective enhanced actions required under the tentative permit should improve water quality throughout the region.

Compliance Determination under Watershed Management Programs:

The tentative permit provided that the compliance determinations provided by the watershed management program plans became effective upon approval of the plans by the Executive Officer. Permittees noted that there is no guarantee as to when the Executive Officer would approve the plans that are submitted by permittees, and as above, commented that planning efforts to develop a watershed management program would be deprioritized as they remain in jeopardy of permit violations due to receiving water limitation exceedances during the period prior to approval of the plan.

In response to these comments, Staff has committed to review and approve/disapprove these plans in a timely manner. In addition, staff also revised the tentative permit to initiate the compliance determination provided by the watershed program upon Permittee submittal of a notice of intent to submit a watershed management plan. However, in order to get this benefit, a permittee would have to provide timely notice of its intent to develop a watershed management program, meet all interim and final deadlines for development of the program, target implementation of watershed control measures in its existing storm water management program (including watershed control measures to eliminated non-storm water discharges of pollutants) to address known contributions of pollutants from MS4 discharges that cause or contribute to exceedances of receiving water limitations, and receive final approval of its watershed management program within 28 months (or an enhanced program within 40 months).

In addition, staff has specified criteria that the watershed management program plan is required to show that BMPs and schedules in the plan will attain water quality standards. Staff has provided further direction that the reasonable assurance will be based on numeric water quality models that are publicly available and peer reviewed, all available water quality monitoring data, and BMP performance documented by public agency or peer reviewed publications.

Based on comments from municipal permittees, NGOs and USEPA, staff revised the tentative permit to include the compliance option for pollutants

that may not be subject to TMDLs. Most permittees are supportive whereas the environmental groups are opposed.

Time to Develop Watershed Management Program Plans:

The tentative permit provided permittees six months to inform the Board if they were going to develop a watershed management program plan, and then six more months to submit the plan to the Regional Board for approval. Permittees noted that this timeline did not provide sufficient time to organize and develop a watershed management program plan, and that it would be beneficial if they could start at the beginning of the municipal fiscal year.

Regional Board staff agrees and proposed extending the submittal date for watershed management program plan to eighteen months. The revised tentative permit also includes language to clarify that permittees must continue to implement the minimum control measures and monitoring programs under the existing permit until watershed management program is approved.

Enhanced Watershed Management Program:

At the hearing on October 4-5, 2012, Los Angeles County Flood Control District presented a concept for an enhanced watershed management program that would focus on large stormwater infiltration projects that could provide long term water supply benefits in addition to removing pollutants from surface waters. These projects could involve entities that are not permittees and located in areas covering more than a single permitted municipality. The environmental groups and other stakeholders expressed interest and support for these “enhanced watershed management programs.” Staff therefore provided new provisions in the tentative permit to allow permittees to develop an “enhances watershed management program.” Stakeholders also pointed out that these projects take longer to plan and implement than projects contemplated by the watershed management program. Staff agrees that extra time is warranted. However, while Board staff are proposing a longer planning schedule (30 months) for these enhanced plans, staff has included early actions as part of the requirements for enhanced watershed management programs.

Reopeners:

The tentative permit contained several provisions for reopening the permit that are standard in many NPDES permits. To address the uncertainties in approved TMDL implementation schedule and new science that may be developed during the course of implementing the watershed management plans, permittees and the State Board requested that certain reopeners be

added. Regional Board staff agree and added reopeners to address the following situations:

- If a TMDL implementation schedule or wasteload allocations are revised by the Regional Board, the permit will be re-opened to incorporate the new provisions.
- If the State Board take action regarding its precedential receiving water limitations language in State Water Board Order WQ 99-05, the Regional Board may consider revising the permit accordingly.

Hydromodification:

The hydromodification provisions in the tentative permit were based on the provisions and requirements in the most recently adopted Ventura County MS4 permit. A comment received by a UCLA professor indicated that alternative methods of calculating the Erosion Potential should be allowed under the permit based on new science that has become available. Staff agreed and revised the tentative permit to allow alternative methods of calculating the erosion potential based on methods to be approved by the Executive Officer.

Middle Santa Ana River Watershed Bacterial Indicator TMDL:

Portions of the cities of Claremont and Pomona drain to the middle Santa Ana River watershed. These portions of the cities are partially in the Los Angeles region and partially in the adjacent Santa Ana region. The Santa Ana Regional Board established a Middle Santa Ana River Watershed Bacteria Indicator TMDL. Staff included provisions in the tentative permit to address that TMDL. Several commenters suggested that regulation under the TMDL and the provisions of this permit for bacteria would create inconsistent requirements. Staff generally agree that MS4 discharges subject to the TMDL are best regulated by the Santa Ana Regional Board and have initiated discussions with the Santa Ana Regional Board staff to initiate a formal agreement (termed a designation agreement) with the Santa Ana Region to effect the jurisdiction transfer for bacterial requirements for MS4 discharges to the Santa Ana Regional Board.

Bacteria TMDL Reconsiderations

Several commenters noted that provisions consistent with the bacteria TMDL reconsiderations recently adopted by the Board on June 7, 2012, including for the Santa Monica Bay Beaches, Ballona Creek, and Marina del Rey Harbor, should be incorporated into the permit. These bacteria reconsiderations are not yet in effect until approved by the State Water Board, the Office of Administrative Law, and USEPA. However, staff has revised the tentative permit to include provisions consistent with the

TMDL reconsideration, which will become applicable upon the effective date of the revisions.

Los Angeles County Flood Control District (LACFCD):

The LACFCD requested that the permit be revised to indicate that they do not have land use authority, and to provide clarification as to which of the minimum control measures LACFCD is subject to. Staff has provided LACFCD with its own section clarifying which of the minimum control measures LACFCD is subject to.

NGOs noted that the revisions to the tentative permit regarding the description of LACFCD may provide an erroneous perception that LACFCD is not subject to the provisions of the MS4 permit, and requested that language is added to clarify that LACFCD is properly named as a permittee. Staff agree that LACFCD is appropriately named as a permittee and added language to the tentative permit to clarify the LACFCD's role as a permittee.

Monitoring Plans:

The tentative permit significantly expanded the scope of monitoring relative to the existing (2001) permit. Although the tentative permit allows permittees to submit integrated monitoring programs for Executive Officer approval, the plans were required to address all of the following monitoring objectives: receiving water monitoring, outfall monitoring, TMDL monitoring, and BMP performance monitoring. This enhanced monitoring is needed in order to properly implement this permit (i.e., in order to assess compliance, enforce, and measure success).

The tentative permit also reduced the number of constituents that were required to be monitored relative to the existing permit. NGOs noted that the reduction of the number of analytes in the tentative permit was not warranted. Staff agreed and revised the tentative permit such that the full set of analytes in the existing permit would be used for initial testing. Based on monitoring results, the Executive Officer would consider eliminating analytes that do not show reasonable potential for exceeding water quality standards.

Permittees commented that the monitoring objectives could be met through customization of monitoring plans such that, for example, data from receiving water monitoring could inform the location of outfall monitoring. They requested that monitoring plans could be customized to meet the monitoring objectives and requested that the permit allow for customization subject to Executive Officer approval.

In the revised tentative permit, the monitoring program provides flexibility for permittees to propose monitoring that meets the five key objectives of MS4 monitoring. In the revised tentative permit, staff has clarified that the flexibility extends to prioritization of toxicity monitoring so that toxicity testing in the outfalls is not required unless triggered by receiving water monitoring. Also, the requirement for a county-wide pyrethroid study was eliminated because staff is working with Department of Pesticide Regulations and we think new guidance and requirements is forthcoming that may eliminate the need for this costly study. In summary, staff have maintained a sound framework for monitoring that will inform compliance and other key monitoring objectives, while affording flexibility and sensitivity to cost issues.

Options:

The Board may:

- 1) Adopt the Second Revised Tentative Order, as proposed;
- 2) Modify the Second Revised Tentative Order in response to comments;
or
- 3) Decline to adopt the Second Revised Tentative Order

Recommendation:

Staff recommends that the Board adopt the Second Revised Tentative Order as proposed.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

LOS ANGELES REGION

320 W. 4th Street, Suite 200, Los Angeles, California 90013

Phone (213) 576 - 6600 • Fax (213) 576 - 6640

<http://www.waterboards.ca.gov/losangeles>

**ORDER NO. R4-2012-XXXX
NPDES PERMIT NO. CAS004001**

**WASTE DISCHARGE REQUIREMENTS
FOR MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) DISCHARGES WITHIN THE
COASTAL WATERSHEDS OF LOS ANGELES COUNTY, EXCEPT THOSE FLOOD CONTROL
DISTRICT, INCLUDING THE COUNTY OF LOS ANGELES, AND THE INCORPORATED CITIES
THEREIN,
~~EXCEPT DISCHARGES ORIGINATING FROM THE CITY OF LONG BEACH MS4~~**

The municipal discharges of storm water and non-storm water by the Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the Los Angeles County Flood Control District with the exception of the City of Long Beach (hereinafter referred to separately as Permittees and jointly as the Dischargers) from the discharge points identified below are subject to waste discharge requirements as set forth in this Order.

I. FACILITY INFORMATION

Table 1. Discharger Information

Dischargers	The Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the Los Angeles County Flood Control District with the exception of the City of Long Beach (See Table 4)
Name of Facility	Municipal Separate Storm Sewer Systems (MS4s) within the Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the Los Angeles County Flood Control District with the exception of the City of Long Beach
Facility Address	Various (see Table 2)
	Various (see Table 2)
The U.S. Environmental Protection Agency (USEPA) and the California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board) have classified the Greater Los Angeles County MS4 as a large municipal separate storm sewer system (MS4) pursuant to 40 CFR section 122.26(b)(4) and a major facility pursuant to 40 CFR section 122.2.	

Table 2. Facility Information

Permittee (WDID)	Contact Information	
Agoura Hills	Mailing Address	30001 Ladyface Court

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Permittee (WDID)	Contact Information	
(4B190147001)		Agoura Hills, CA 91301
	Facility Contact, Title, and E-mail	Ken Berkman, City Engineer kberkman@agoura-hills.ca.us
Alhambra (4B190148001)	Mailing Address	111 South First Street Alhambra, CA 91801-3796
	Facility contact, title, and E-mail	David Dolphin ddolphin@cityofalhambra.org
Arcadia (4B190149001)	Mailing Address	P.O. Box 60021 Arcadia, CA 91066-6021
	Facility Contact, Title, and E-mail	Susannah Turney, Environmental Services Officer vhevener@ci.arcadia.ca.us
Artesia (4B190150001)	Mailing Address	18747 Clarkdale Avenue Artesia, CA 90701-5899
	Facility Contact, Title, and E-mail	Maria Dadian, Director of Public Works mdadian@cityofartesia.ci.us
Azusa (4B190151001)	Mailing Address	213 East Foothill Boulevard Azusa, CA 91702
	Facility Contact, Title, and E-mail	Carl Hassel, City Engineer chassel@ci.azusa.ca.us
Baldwin Park (4B190152001)	Mailing Address	14403 East Pacific Avenue Baldwin Park, CA 91706-4297
	Facility Contact, Title, and E-mail	David Lopez, Associate Engineer dlopez@baldwinpark.com
Bell (4B190153001)	Mailing Address	6330 Pine Avenue Bell, CA 90201-1291
	Facility Contact, Title, and E-mail	Terri Rodrigue, City Engineer trodrigue@cityofbell.org
Bell Gardens (4B190139002)	Mailing Address	7100 South Garfield Avenue Bell Gardens, CA 90201-3293
	Facility contact, title, and Phone	John Oropeza, Director of Public Works (562) 806-7700
Bellflower (4B190154001)	Mailing Address	16600 Civic Center Drive Bellflower, CA 90706-5494
	Facility Contact, Title, and E-mail	Bernie Iniguez, Management Analyst biniguez@bellflower.org
Beverly Hills (4B190132002)	Mailing Address	455 North Rexford Drive Beverly Hills, CA 90210
	Facility Contact, Title, and E-mail	Vincent Chee, Project Civil Engineer kgettler@beverlyhills.org
Bradbury (4B190155001)	Mailing Address	600 Winston Avenue Bradbury, CA 91010-1199
	Facility contact, title, and E-mail	Elroy Kiepke, City Engineer mkeith@cityofbradbury.org
Burbank (4B190101002)	Mailing Address	P.O. Box 6459 Burbank, CA 91510
	Facility contact, title, and E-mail	Bonnie Teaford, Public Works Director bteaford@ci.burbank.ca.us
Calabasas (4B190157001)	Mailing Address	26135 Mureau Road Calabasas, CA 91302-3172
	Facility contact, title, and E-mail	Alex Farassati, ESM afarassati@cityofcalabasas.com

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Permittee (WDID)	Contact Information	
Carson (4B190158001)	Mailing Address	P.O. Box 6234 Carson, CA 90745
	Facility contact, title, and E-mail	Patricia Elkins, Building Construction Manager pelkins@carson.ca.us
Cerritos (4B190159001)	Mailing Address	P.O. Box 3130 Cerritos, CA 90703-3130
	Facility Contact, Title, and E-mail	Mike O'Grady, Environmental Services mo'grady@cerritos.us
Claremont (4B190160001)	Mailing Address	207 Harvard Avenue Claremont, CA 91711-4719
	Facility Contact, Title, and E-mail	Craig Bradshaw, City Engineer cbradshaw@ci.claremont.ca.us
Commerce (4B190161001)	Mailing Address	2535 Commerce Way Commerce, CA 90040-1487
	Facility contact, title, and E-mail	Gina Nila gnila@ci.commerce.ca.us
Compton (4B190162001)	Mailing Address	205 South Willowbrook Avenue Compton, CA 90220-3190
	Facility contact, title, and Phone	Hien Nguyen, Assistant City Engineer 310-761-1476
Covina (4B190163001)	Mailing Address	125 East College Street Covina, CA 91723-2199
	Facility Contact, Title, and E-mail	Charles Redden Vivian Castro, Environmental Services Manager vcastro@covinaca.gov
Cudahy (4B190164001)	Mailing Address	P.O. Box 1007 Cudahy, CA 90201-6097
	Facility contact, title, and E-mail	Hector Rodriguez, City Manager hrodriguez@cityofcudahy.ca.us
Culver City (4B190165001)	Mailing Address	9770 Culver Boulevard Culver City, CA 90232-0507
	Facility contact, title, and Phone	Damian Skinner, Manager 310-253-6421
Diamond Bar (4B190166001)	Mailing Address	21825 East Copley Drive Diamond Bar, CA 91765-4177
	Facility Contact, Title, and E-mail	David Liu, Director of Public Works dliu@diamondbarca.gov
Downey (4B190167001)	Mailing Address	P.O. Box 7016 Downey, CA 90241-7016
	Facility contact, title, and E-mail	Yvonne Blumberg yblumberg@downeyca.org
Duarte (4B190168001)	Mailing Address	1600 Huntington Drive Duarte, CA 91010-2592
	Facility contact, title, and Phone	Steve Esbenshades, Engineering Division Manager (626) 357-7931 ext. 233
El Monte (4B190169001)	Mailing Address	P.O. Box 6008 El Monte, CA 91731
	Facility contact, title, and Phone	James A Enriquez, Director of Public Works (626) 580-2058
El Segundo (4B190170001)	Mailing Address	350 Main Street El Segundo, CA 90245-3895
	Facility Contact, Title,	Ron Fajardo Stephanie Katsouleas, Wastewater

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Permittee (WDID)	Contact Information	
	<u>Phone, and E-mail</u>	Supervisor Public Works Director (310) 524-2356 skatsouleas@elsegundo.org
Gardena (4B190118002)	Mailing Address	P.O. Box 47003 Gardena, CA 90247-3778
	Facility Contact, Title, and E-mail	Ron Jackson, Building Maintenance Supervisor jfelix@ci.gardena.ci.us
Glendale (4B190171001)	Mailing Address	Engineering Section, 633 East Broadway, Room 209 Glendale, CA 91206-4308
	Facility contact, title, and E-mail	Maurice Oillataguerre, Senior Environmental Program Scientist moillataguerre@ci.glendale.ca.us
Glendora (4B190172001)	Mailing Address	116 East Foothill Boulevard Glendora, CA 91741
	Facility Contact, Title, and E-mail	Dave Davies, Deputy Director of Public Works ddavies@ci.glendora.ca.us
Hawaiian Gardens (4B190173001)	Mailing Address	21815 Pioneer Boulevard Hawaiian Gardens, CA 90716
	Facility Contact, Title, and E-mail	Joseph Colombo, Director of Community Development jcolombo@ghcity.org
Hawthorne (4B190174001)	Mailing Address	4455 West 126 th Street Hawthorne, CA 90250-4482
	Facility Contact, Title, and E-mail	Arnold Shadbeh, Chief General Service and Public Works Arnold Shadbeh, Chief General Service and Public Works ashadbeh@cityofhawthorne.org
Hermosa Beach (4B190175001)	Mailing Address	1315 Valley Drive Hermosa Beach, CA 90254-3884
	Facility Contact, Title, and E-mail	Homayoun Behboodi, Associate Engineer hbehboodi@hermosabch.org
Hidden Hills (4B190176001)	Mailing Address	6165 Spring Valley Road Hidden Hills, CA 91302
	Facility contact, title, and Phone	Kimberly Colberts, Environmental Coordinator (310) 257-2004
Huntington Park (4B190177001)	Mailing Address	6550 Miles Avenue Huntington Park, CA 90255
	Facility contact, title, and Phone	Craig Melich, City Engineer and City Official 323-584-6253
Industry (4B190178001)	Mailing Address	P.O. Box 3366 Industry, CA 91744-3995
	Facility Contact, Title,	Mike Nagaoka, Director of Public Safety
Inglewood (4B190179001)	Mailing Address	P.O. Box 65001 W. Manchester Blvd, 3 rd Floor Inglewood, CA 90301-1750
	Facility Contact, Title, and E-mail	Jim Davis Lauren Amimoto, Senior Administrative Analyst eparkerlamimoto@cityofinglewood.org
Irwindale (4B190180001)	Mailing Address	5050 North Irwindale Avenue Irwindale, CA 91706
	Facility Contact, Title, and E-mail	Kwok Tam, Director of Public Works ktam@ci.irwindale.ca.us
La Canada Flintridge	Mailing Address	1327 Foothill Boulevard La Canada Flintridge, CA 91011-2137

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Permittee (WDID)	Contact Information	
(4B190181001)	Facility contact, title, and E-mail	Edward G. Hitti, Director of Public Works ehitti@lcf.ca.gov
La Habra Heights (4B190182001)	Mailing Address	1245 North Hacienda Boulevard La Habra Heights, CA 90631-2570
	Facility Contact, Title, and E-mail	Shauna Clark, City Manager shaunac@lhhcity.org
La Mirada (4B190183001)	Mailing Address	13700 La Mirada Boulevard La Mirada, CA 90638-0828
	Facility Contact, Title, and E-mail	Steve Forster, Public Works Director sforster@cityoflamirada.org
La Puente (4B190184001)	Mailing Address	15900 East Marin Street La Puente, CA 91744-4788
	Facility Contact, Title, and E-mail	John DiMario, Director of Development Services jdimario@lapuente.org
La Verne (4B190185001)	Mailing Address	3660 "D" Street La Verne, CA 91750-3599
	Facility Contact, Title, and E-mail	Daniel Keeseey, Director of Public Works dkeeseey@ci.la-verne.ca.us
Lakewood (4B190186001)	Mailing Address	P.O. Box 158 Lakewood, CA 90714-0158
	Facility contact, title, and E-mail	Konya Vivanti kvivanti@lakewoodcity.org
Lawndale (4B190127002)	Mailing Address	14717 Burin Avenue Lawndale, CA 90260
	Facility Contact, Title,	Marlene Miyoshi, Senior Administrative Analyst
Lomita (4B190187001)	Mailing Address	P.O. Box 339 Lomita, CA 90717-0098
	Facility Contact, Title, and E-mail	Tom A. Odom, City Administrator d.tomita@lomitacity.com
Los Angeles (4B190188001)	Mailing Address	1149 S. Broadway, 10 th Floor Los Angeles, CA 90015
	Facility contact, title, and Phone	Shahram Kharaghani, Program Manager (213) 485-0587
Lynwood (4B190189001)	Mailing Address	11330 Bullis Road Lynwood, CA 90262-3693
	Facility contact, title, and Phone	Josef Kekula 310-603-0220 ext. 287
Malibu (4B190190001)	Mailing Address	23845-23825 Stuart Ranch Road Malibu, CA 90265-4861
	Facility Contact, Title, and E-mail	Jennifer VeceolaBrown, Environmental Program Analyst jveceolabrown@malibucity.org
Manhattan Beach (4B190191001)	Mailing Address	1400 Highland Avenue Manhattan Beach, CA 90266-4795
	Facility Contact, Title, and Email	Brian Wright, Water Supervisor bwright@citymb.info
Maywood (4B190192001)	Mailing Address	4319 East Slauson Avenue Maywood, CA 90270-2897
	Facility contact, title, and Phone	Andre Dupret, Project Manager 323-562-5721
Monrovia (4B190193001)	Mailing Address	415 South Ivy Avenue Monrovia, CA 91016-2888

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Permittee (WDID)	Contact Information	
	Facility contact, title, and E-mail	Heather Maloney hmaloney@ci.monrovia.ca.gov
Montebello (4B190194001)	Mailing Address	1600 West Beverly Boulevard Montebello, CA 90640-3970
	Facility contact, title, and Phone	Cory Roberts croberts@aaeinc.com
Monterey Park (4B190195001)	Mailing Address	320 West Newmark Avenue Monterey Park, CA 91754-2896
	Facility contact, title, and E-mail	Amy Ho, 626-307-1383 amho@montereypark.ca.gov John Hunter (Consultant) at jhunter@jhla.net
Norwalk (4B190196001)	Mailing Address	P.O. Box 1030 Norwalk, CA 90651-1030
	Facility Contact, Title,	Chino Consunji, City Engineer
Palos Verdes Estates (4B190197001)	Mailing Address	340 Palos Verdes Drive West Palos Verdes Estates, CA 90274
	Facility Contact, Title, and E-mail	Allan Rigg, Director of Public Works arigg@pvestates.org
Paramount (4B190198001)	Mailing Address	16400 Colorado Avenue Paramount, CA 90723-5091
	Facility contact, title, and E-mail	Chris Cash, Utility and Infrastructure Assistant Director ccash@paramountcity.org
Pasadena (4B190199001)	Mailing Address	P.O. Box 7115 Pasadena, CA 91109-7215
	Facility contact, title, and E-mail	Stephen Walker swalker@cityofpasadena.net
Pico Rivera (4B190200001)	Mailing Address	P.O. Box 1016 Pico Rivera, CA 90660-1016
	Facility contact, title, and E-mail	Art Cervantes, Director of Public Works acervantes@pico-rivera.org
Pomona (4B190145003)	Mailing Address	P.O. Box 660 Pomona, CA 91769-0660
	Facility Contact, Title, and E-mail	Kimberly Colbert, Julie Carver, Environmental Compliance Consultant Programs Coordinator kimberlyjulie_carvercolbert@ci.pomona.ca.us
Rancho Palos Verdes (4B190201001)	Mailing Address	30940 Hawthorne Boulevard Rancho Palos Verdes, CA 90275
	Facility Contact, Title, and E-mail	Ray Holland, Interim Public Works Director clehr@rpv.com
Redondo Beach (4B190143002)	Mailing Address	P.O. Box 270 Redondo Beach, CA 90277-0270
	Facility Contact, Title, and E-mail	Mike Shay, Principal Civil Engineer mshay@redondo.org
Rolling Hills (4B190202001)	Mailing Address	2 Portuguese Bend Road Rolling Hills, CA 90274-5199
	Facility Contact, Title, and E-mail	Greg Grammer, Assistant to the City Manager ggrammer@rollinghillsestatesca.gov
Rolling Hills Estates (4B190203001)	Mailing Address	4045 Palos Verdes Drive North Rolling Hills Estates, CA 90274
	Facility Contact, Title, and E-mail	Greg Grammer, Assistant to the City Manager ggrammer@rollinghillsestatesca.gov

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Permittee (WDID)	Contact Information	
Rosemead (4B190204001)	Mailing Address	8838 East Valley Boulevard Rosemead, CA 91770-1787
	Facility contact, title, and Phone	Chris Marcarello, Director of PW 626-569-2118
San Dimas (4B190205001)	Mailing Address	245 East Bonita Avenue San Dimas, CA 91773-3002
	Facility Contact, Title, and E-mail	Latoya Cyrus, Environmental Services Coordinator, lcyrus@ci.san-dimas.ca.us
San Fernando (4B190206001)	Mailing Address	117 Macneil Street San Fernando, CA 91340
	Facility contact, title, and E-mail	Ron Ruiz, Director of Public Works rruiz@sfcity.org
San Gabriel (4B190207001)	Mailing Address	425 South Mission Drive San Gabriel, CA 91775
	Facility contact, title, and Phone	Daren T. Grilley, City Engineer 626-308-2806 ext. 4631
San Marino (4B190208001)	Mailing Address	2200 Huntington Drive San Marino, CA 91108-2691
	Facility contact, title, and E-mail	Chuck Richie, Director of Parks and Public Works criche@cityofsanmarino.org
Santa Clarita (4B190117001)	Mailing Address	23920 West Valencia Boulevard, Suite 300 Santa Clarita, CA 91355
	Facility contact, title, and Phone	Travis Lange, Environmental Services Manager 661-255-4337
Santa Fe Springs (4B190108003)	Mailing Address	P.O. Box 2120 Santa Fe Springs, CA 90670-2120
	Facility Contact, Title, and E-mail	Sarina Morales-Choate, Civil Engineer Assistant smorales-choate@santafesprings.org
Santa Monica (4B190122002)	Mailing Address	1685 Main Street Santa Monica, CA 90401-3295
	Facility Contact, Title, and E-mail	Neal Shapiro, Urban Runoff Coordinator nshapiro@smgov.net
Sierra Madre (4B190209001)	Mailing Address	232 West Sierra Madre Boulevard Sierra Madre, CA 91024-2312
	Facility contact, title, and phone	James Carlson, Management Analyst 626-355-7135 ext. 803
Signal Hill (4B190210001)	Mailing Address	2175 Cherry Avenue Signal Hill, CA 90755
	Facility contact, title, and Phone	John Hunter 562-802-7880 jhunter@jlha.net
South El Monte (4B190211001)	Mailing Address	1415 North Santa Anita Avenue South El Monte, CA 91733-3389
	Facility contact, title, and Phone	Anthony Ybarra, City Manager 626-579-6540
South Gate (4B190212001)	Mailing Address	8650 California Avenue South Gate, CA 90280
	Facility contact, title, and E-mail	John Hunter 562-802-7880 jhunter@jlha.net

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Permittee (WDID)	Contact Information	
South Pasadena (4B190213001)	Mailing Address	1414 Mission Street South Pasadena, CA 91030-3298
	Facility contact, title, and E-mail	John Hunter 562-802-7880 jhunter@jlha.net
Temple City (4B190214001)	Mailing Address	9701 Las Tunas Drive Temple City, CA 91780-2249
	Facility contact, title, and Phone	Joe Lambert at 626-285-2171 or John Hunter 562-802-7880 jhunter@jlha.net
Torrance (4B190215001)	Mailing Address	3031 Torrance Boulevard Torrance, CA 90503-5059
	Facility Contact, Title, and Phone	Leslie Cortez, Senior Administrative Assistant
Vernon (4B190216001)	Mailing Address	4305 Santa Fe Avenue Vernon, CA 90058-1786
	Facility contact, title, and Phone	Claudia Arellano 323-583-8811
Walnut (4B190217001)	Mailing Address	P.O. Box 682 Walnut, CA 91788
	Facility Contact, Title, and Phone	Jack Yoshino, Senior Management Assistant
West Covina (4B190218001)	Mailing Address	P.O. Box 1440 West Covina, CA 91793-1440
	Facility Contact, Title, and E-mail	Samuel Gutierrez, Engineering Technician sam.gutierrez@westcovina.org
West Hollywood (4B190219001)	Mailing Address	8300 Santa Monica Boulevard West Hollywood, CA 90069-4314
	Facility Contact, Title, and E-mail	Jan Harmon, Sharon Perlstein, Environmental Services Specialist City Engineer jharmonsp@weho.org
Westlake Village (4B190220001)	Mailing Address	31200 Oak Crest Drive Westlake Village, CA 91361
	Facility Contact, Title, and E-mail	Roxanne Hughes, Stormwater Program Coordinator rhughes@wlv.org
Whittier (4B190221001)	Mailing Address	13230 Penn Street Whittier, CA 90602-1772
	Facility Contact, Title, and E-mail	David Mochizuki, Director of Public Works dmoichizuki@cityofwhittier.org
County of Los Angeles (4B190107099)	Mailing Address	900 South Fremont Avenue Alhambra, CA 91803
	Facility contact, title, and Phone	Gary Hildebrand, Assistant Deputy Director Terri Grant, Division Engineer 626-458-4300 ghildeb@dpw.lacounty.gov
Los Angeles County Flood Control District (4B190107101)	Mailing Address	900 South Fremont Avenue Alhambra, CA 91803
	Facility contact, title, and Phone	Gary Hildebrand, Assistant Deputy Director Terri Grant, Division Engineer 626-458-4300 ghildeb@dpw.lacounty.gov

Table 3. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
All Municipal Separate Storm Sewer System discharge points within the Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the Los Angeles County Flood Control District with the exception of the City of Long Beach	Storm Water and Non-Storm Water	Numerous	Numerous	Surface waters identified in Tables 2-1, 2-1a, 2-3, and 2-4, and Appendix 1, Table 1 of the <i>Water Quality Control Plan - Los Angeles Region (Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties)</i> , and other unidentified tributaries to these surface waters within the following Watershed Management Areas: (1) Santa Clara River Watershed; (2) Santa Monica Bay Watershed Management Area, including Malibu Creek Watershed and Ballona Creek Watershed; (3) Los Angeles River Watershed; (4) Dominguez Channel and Greater Los Angeles/Long Beach Harbors Watershed Management Area; (5) Los Cerritos Channel and Alamitos Bay Watershed Management Area; (6) San Gabriel River Watershed; and (7) Santa Ana River Watershed. ¹

Table 4. Administrative Information

This Order was adopted by the California Regional Water Quality Control Board, Los Angeles Region on:	<Adoption Date>
This Order becomes effective on:	<Effective Date>
This Order expires on:	<Expiration Date>
In accordance with Title 23, Division 3, Chapter 9 of the California Code of Regulations and Title 40, Part 122 of the Code of Federal Regulations, each Discharger shall file a Report of Waste Discharge as application for issuance of new waste discharge requirements no later than:	180 days prior to the Order expiration date above

¹ Note that the Santa Ana River Watershed lies primarily within the boundaries of the Santa Ana Regional Water Quality Control Board. However, a portion of the Chino Basin subwatershed lies within the jurisdictions of Pomona and Claremont in Los Angeles County. The primary receiving water within the Los Angeles County portion of the Chino Basin subwatershed is San Antonio Creek.

R E V I S E D T E N T A T I V E

In accordance with section 2235.4 of Title 23 of the California Code of Regulations, the terms and conditions of an expired permit are automatically continued pending issuance of a new permit if all requirements of the federal NPDES regulations on continuation of expired permits are complied with. Accordingly, if a new order is not adopted by the expiration date above, then the Permittees shall continue to implement the requirements of this Order until a new one is adopted.

I, Samuel Unger, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on <Adoption Date>.

Samuel Unger, Executive Officer

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II. FINDINGS

The California Regional Water Quality Control Board, Los Angeles Region (hereinafter Regional Water Board) finds:

A. Nature of Discharges and Sources of Pollutants

Storm water and non-storm water discharges consist of surface runoff generated from various land uses, which are conveyed via the municipal separate storm sewer system and ultimately discharged into surface waters throughout the region. Discharges of storm water and non-storm water from the Los Angeles County Municipal Separate Storm Sewer Systems (MS4s) within the Coastal Watersheds of Los Angeles County convey pollutants to surface waters throughout the Los Angeles Region. The primary pollutants of concern in these discharges, as identified by the Los Angeles County Flood Control District Integrated Receiving Water Impacts Report (1994-~~2000~~2005), are indicator bacteria, total aluminum, copper, lead, zinc, diazinon, and cyanide~~indicator bacteria, nutrients, total dissolved solids, turbidity, total suspended solids, total aluminum, dissolved cadmium, copper, lead, total mercury, nickel, zinc, cyanide, bis(2-ethylhexyl)phthalate, polycyclic aromatic hydrocarbons (PAHs), diazinon, and chlorpyrifos~~. Aquatic toxicity, particularly during wet weather, is also a concern based on a review of Annual Monitoring Reports from 2005-10. Storm water and non-storm water discharges of debris and trash are also a pervasive water quality problem in the Los Angeles Region though significant strides have been made by a number of Permittees in addressing this problem through the implementation of control measures to achieve wasteload allocations established in trash TMDLs.

Pollutants in storm water and non-storm water have damaging effects on both human health and aquatic ecosystems. Water quality assessments conducted by the Regional Water Board have identified impairment of beneficial uses of water bodies in the Los Angeles Region caused or contributed to by pollutant loading from municipal storm water and non-storm water discharges. As a result of these impairments, there are beach postings and closures, fish consumption advisories, local and global ecosystem and aesthetic impacts from trash and debris, reduced habitat for threatened and endangered species, among others. The Regional Water Board and USEPA have established 33 total maximum daily loads (TMDLs) that identify Los Angeles County MS4 discharges as one of the pollutant sources causing or contributing to these water quality impairments.

B. Permit History

Prior to the issuance of this Order, Regional Water Board Order No. 01-182 served as the NPDES Permit for MS4 storm water and non-storm water discharges within the Coastal Watersheds of the County of Los Angeles. The requirements of Order No. 01-182 applied to the Los Angeles County Flood Control District, the unincorporated areas of Los Angeles County under County jurisdiction, and 84 Cities within the Los Angeles County Flood Control District with the exception of the City of Long Beach. The first

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county-wide MS4 permit for the County of Los Angeles and the incorporated areas therein was Order No. 90-079, adopted by the Regional Water Board on June 18, 1990.

Under Order No. 01-182, the Los Angeles County Flood Control District was designated the Principal Permittee, and the County of Los Angeles and 84 incorporated Cities were each designated Permittees. The Principal Permittee coordinated and facilitated activities necessary to comply with the requirements of Order No. 01-182, but was not responsible for ensuring compliance of any of the other Permittees. The designation of a Principal Permittee has not been carried over from Order No. 01-182.

Order No. 01-182 was subsequently amended by the Regional Water Board on September 14, 2006 by Order No. R4-2006-0074 to incorporate provisions consistent with the assumptions and requirements of the Santa Monica Bay Beaches Dry Weather Bacteria TMDL (SMB Dry Weather Bacteria TMDL) waste load allocations (WLAs). As a result of a legal challenge to Order No. R4-2006-0074, the Los Angeles County Superior Court issued a peremptory writ of mandate on July 23, 2010 requiring the Regional Water Board to void and set aside the amendments adopted through Order No. R4-2006-0074 in Order No. 01-182. The Court concluded that the permit proceeding at which Order No. R4-2006-0074 was adopted was procedurally deficient. The Court did not address the substantive merits of the amendments themselves, and thus made no determination about the substantive validity of Order No. R4-2006-0074. In compliance with the writ of mandate, the Regional Water Board voided and set aside the amendments adopted through Order No. R4-2006-0074 on April 14, 2011. This Order reincorporates requirements equivalent to the 2006 provisions to implement the SMB Dry Weather Bacteria TMDL.

In addition, Order No. 01-182 was amended on August 9, 2007 by Order No. R4-2007-0042 to incorporate provisions consistent with the assumptions and requirements of the Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL, and was again amended on December 10, 2009 by Order No. R4-2009-0130 to incorporate provisions consistent with the assumptions and requirements of the Los Angeles River Watershed Trash TMDL.

C. Permit Application

On June 12, 2006, prior to the expiration date of Order No. 01-182, all of the Permittees filed Reports of Waste Discharge (ROWD) applying for renewal of their waste discharge requirements that serve as an NPDES permit to discharge storm water and authorized and conditionally exempt non-storm water through their MS4 to surface waters. Specifically, the Los Angeles County Flood Control District (LACFCD) submitted an ROWD application on behalf of itself, the County of Los Angeles, and 78 other Permittees. Several Permittees under Order No. 01-182 elected to not be included as part of the Los Angeles County Flood Control District's ROWD. On June 12, 2006, the Cities of Downey and Signal Hill each submitted an individual ROWD application requesting a separate MS4 Permit; and the Upper San Gabriel River Watershed Coalition, comprised of the cities of Azusa, Claremont, Glendora, Irwindale, and Whittier

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also submitted an individual ROWD application requesting a separate MS4 Permit for these cities. In 2010, the LACFCD withdrew from its participation in the 2006 ROWD submitted in conjunction with the County and 78 other co-permittees, and submitted a new ROWD also requesting an individual MS4 permit. The LACFCD also requested that, if an individual MS4 permit was not issued to it, it no longer be designated as the Principal Permittee and it be relieved of Principal Permittee responsibilities. The Regional Water Board evaluated each of the 2006 ROWDs and notified all of the Permittees that their ROWDs did not satisfy federal storm water regulations contained in the USEPA Interpretive Policy Memorandum on Reapplication Requirements for Municipal Separate Storm Sewer Systems; Final Rule, August 9, 1996 (61 *Fed Reg.* 41697). Because each ROWD did not satisfy federal requirements, the Regional Water Board deemed all four 2006 ROWDs incomplete. The Regional Water Board also evaluated the LACFCD's 2010 ROWD and found that it too did not satisfy federal requirements for MS4s.

Though five separate ROWDs were submitted, the Regional Water Board retains discretion as the permitting authority to determine whether to issue permits for discharges from MS4s on a system-wide or jurisdiction-wide basis (Clean Water Act (CWA) § 402(p)(3)(B)(i); 40 CFR section 122.26, subdivisions (a)(1)(v) and (a)(3)(ii)). Because of the complexity and networking of the MS4 within Los Angeles County, which often results in commingled discharges, the Regional Water Board has previously adopted a system-wide approach to permitting MS4 discharges within Los Angeles County.

In evaluating the five separate ROWDs, the Regional Water Board considered the appropriateness of permitting discharges from MS4s within Los Angeles County on a system-wide or jurisdiction-wide basis or a combination of both. Based on that evaluation, the Regional Water Board again determined that, because of the complexity and networking of the MS4 within Los Angeles County, that one system-wide permit is appropriate. In order to provide individual Permittees with more specific requirements, certain provisions of this Order are organized by watershed management area, which is appropriate given the requirements to implement 33 watershed-based TMDLs. The Regional Water Board also determined that because the LACFCD owns and operates large portions of the MS4 infrastructure, including but not limited to catch basins, storm drains, outfalls and open channels, in each coastal watershed management area within Los Angeles County as the primary owner and operator of the Los Angeles County MS4, the LACFCD should remain a Permittee in the single system-wide permit; however, this Order relieves the LACFCD of its role as "Principal Permittee."

D. Permit Coverage and Facility Description

The Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the Los Angeles County Flood Control District with the exception of the City of Long Beach (see Table 5, List of Permittees), hereinafter referred to separately as Permittees and jointly as the Dischargers, discharge storm water and non-storm water from municipal separate storm sewer systems (MS4s), also called storm drain systems. For the purposes of this Order, references to the

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“Discharger” or “Permittee” in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger, or Permittees herein.

The area covered under this Order encompasses more than 3,000 square miles. This area contains a vast drainage network that serves incorporated and unincorporated areas in every Watershed Management Area within the Los Angeles Region. Maps depicting the major drainage infrastructure within the area covered under this Order are included in Attachment C of this Order.

Table 5. List of Permittees

Agoura Hills	Hawaiian Gardens	Pomona
Alhambra	Hawthorne	Rancho Palos Verdes
Arcadia	Hermosa Beach	Redondo Beach
Artesia	Hidden Hills	Rolling Hills
Azusa	Huntington Park	Rolling Hills Estates
Baldwin Park	Industry	Rosemead
Bell	Inglewood	San Dimas
Bell Gardens	Irwindale	San Fernando
Bellflower	La Canada Flintridge	San Gabriel
Beverly Hills	La Habra Heights	San Marino
Bradbury	La Mirada	Santa Clarita
Burbank	La Puente	Santa Fe Springs
Calabasas	La Verne	Santa Monica
Carson	Lakewood	Sierra Madre
Cerritos	Lawndale	Signal Hill
Claremont	Lomita	South El Monte
Commerce	Los Angeles	South Gate
Compton	Lynwood	South Pasadena
Covina	Malibu	Temple City
Cudahy	Manhattan Beach	Torrance
Culver City	Maywood	Vernon
Diamond Bar	Monrovia	Walnut
Downey	Montebello	West Covina
Duarte	Monterey Park	West Hollywood
El Monte	Norwalk	Westlake Village
El Segundo	Palos Verdes Estates	Whittier
Gardena	Paramount	County of Los Angeles
Glendale	Pasadena	Los Angeles County Flood
Glendora	Pico Rivera	Control District

~~The Los Angeles County Flood Control District encompasses more than 3,000 square miles. The LACFCD contains a vast drainage network that serves incorporated and unincorporated areas in every Watershed Management Area within the Los Angeles Region. The drainage infrastructure includes approximately 500 miles of open channels, 2,900 miles of underground storm drains, and over 80,000 catch basins. Maps depicting~~

~~the major drainage infrastructure of the Los Angeles County MS4 are included in Attachment C of this Order.~~

E. Los Angeles County Flood Control District

In 1915, the California Legislature enacted the Los Angeles County Flood Control Act, establishing the Los Angeles County Flood Control District (LACFCD). The objects and purposes of the Act are to provide for the control and conservation of the flood, storm and other waste waters within the flood control district. Among its other powers, the LACFCD also has the power to preserve, enhance, and add recreational features to lands or interests in lands contiguous to its properties for the protection, preservation, and use of the scenic beauty and natural environment for the properties or the lands. The LACFCD is governed, as a separate entity, by the County of Los Angeles Board of Supervisors.

The LACFCD's system includes the majority of drainage infrastructure within incorporated and unincorporated areas in every watershed, including approximately 500 miles of open channel, 3,500 miles of underground drains, and an estimated 88,800 catch basins, and several dams. Portions of the LACFCD's current system were originally unmodified natural rivers and water courses.

The LACFCD's system conveys both storm and non-storm water throughout the Los Angeles basin. Other Permittees' MS4s connect and discharge to the LACFCD's system.

The waters and pollutants discharged from the LACFCD's system come from various sources. These sources can include storm water and non-storm water from the Permittees under this permit and other NPDES and non-NPDES Permittees discharging into the LACFCD's system, including industrial waste water dischargers, waste water treatment facilities, industrial and construction stormwater Permittees, water suppliers, government entities, CERCLA potentially responsible parties, and Caltrans. Sources can also include discharges from school districts that do not operate large or medium-sized municipal storm sewers and discharges from entities that have waste discharge requirements or waivers of waste discharge requirements.

Unlike other Permittees, the LACFCD does not own or operate any municipal sanitary sewer systems, public streets, roads, or highways.

The LACFCD has no planning, zoning, development permitting or other land use authority over industrial or commercial facilities, new developments or re-development projects, or development construction sites located in any incorporated or unincorporated areas within its service area. The Permittees that have such land use authority are responsible for implementing a storm water management program to inspect and control pollutants from industrial and commercial facilities, new development and re-development projects, and development construction sites within their jurisdictional boundaries.

E.F. Permit Scope

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This Order regulates municipal discharges of storm water and non-storm water from the Permittees' MS4s. Section 122.26(b)(8) of title 40 of the Code of Federal Regulations (CFR) defines an MS4 as “a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) [o]wned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States; (ii) [d]esigned or used for collecting or conveying storm water; (iii) [w]hich is not a combined sewer; and (iv) [w]hich is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.”

Storm water discharges consist of those discharges that originate from precipitation events. Federal regulations define “storm water” as “storm water runoff, snow melt runoff, and surface runoff and drainage.” (40 CFR § 122.26(b)(13).) While “surface runoff and drainage” is not defined in federal law, USEPA’s preamble to its final storm water regulations demonstrates that the term is related to precipitation events such as rain and/or snowmelt. (55 Fed. Reg. 47990, 47995-96 (Nov. 16, 1990)).

Non-storm water discharges consist of all discharges through an MS4 that do not originate from precipitation events. Non-storm water discharges through an MS4 are prohibited unless authorized under a separate NPDES permit; authorized by USEPA pursuant to Sections 104(a) or 104(b) of the federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); composed of natural flows; the result of emergency fire fighting activities; or conditionally exempted in this Order.

A permit issued to more than one Permittee for MS4 discharges may contain separate storm water management programs for particular Permittees or groups of Permittees. 40 CFR § 122.26(d)(2)(iv). Given the LACFCD’s limited land use authority, it is appropriate for the LACFCD to have a separate and uniquely-tailored storm water management program. Accordingly, the storm water management program minimum control measures imposed on the LACFCD in Part VI.D of this Order differ in some ways from the minimum control measures imposed on other Permittees. Namely, aside from its own properties and facilities, the LACFCD is not subject to the Industrial/Commercial Facilities Program, the Planning and Land Development Program, and the Development Construction Program. However, as a discharger of storm and non-storm water, the LACFCD remains subject to the Public Information and Participation Program and the Illicit Connections and Illicit Discharges Elimination Program. Further, as the owner and operator of certain properties, facilities and infrastructure, the LACFCD remains subject to requirements of a Public Agency Activities Program.

F.G. Geographic Coverage and Watershed Management Areas

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The municipal storm water and non-storm water discharges flow into receiving waters in the Watershed Management Areas of the Santa Clara River Watershed; Santa Monica Bay Watershed Management Area, including Malibu Creek Watershed and Ballona Creek Watershed; Los Angeles River Watershed; Dominguez Channel and Greater Los Angeles/Long Beach Harbors Watershed Management Area; Los Cerritos Channel and Alamitos Bay Watershed Management Area; San Gabriel River Watershed; and Santa Ana River Watershed.

This Order redefines Watershed Management Areas (WMAs) consistent with the delineations used in the Regional Water Board's Watershed Management Initiative. Permittees included in each of the WMAs are listed in Attachment K.

Maps depicting each WMA, its subwatersheds, and the major receiving waters therein are included in Attachment B.

Federal, state, regional or local entities in jurisdictions outside the Los Angeles County Flood Control District, and not currently named as Permittee to this Order, may operate MS4 facilities and/or discharge to the MS4 and water bodies covered by this Order. Pursuant to 40 CFR sections 122.26(d)(1)(ii) and 122.26(d)(2)(iv), each Permittee shall maintain the necessary legal authority to control the contribution of pollutants to its MS4 and shall include in its storm water management program a comprehensive planning process that includes intergovernmental coordination, where necessary.

Sources of MS4 discharges into receiving waters in the County of Los Angeles but not covered by this Order include the following:

- About 34 square miles of unincorporated area in Ventura County, which drain into Malibu Creek and then to Santa Monica Bay,
- About 9 square miles of the City of Thousand Oaks, which also drain into Malibu Creek and then to Santa Monica Bay, and
- About 86 square miles of area in Orange County, which drain into Coyote Creek and then into the San Gabriel River.

Specifically, the Orange County Flood Control District (OCFCD) owns and operates the Los Alamitos Retarding Basin and Pumping Station (Los Alamitos Retarding Basin). The Los Alamitos Retarding Basin is within the San Gabriel River Watershed, and is located adjacent to the Los Angeles and Orange County boundary. The majority of the 30-acre Los Alamitos Retarding Basin is in Orange County; however, the northwest corner of the facility is located in the County of Los Angeles. Storm water and non-storm water discharges, which drain to the Los Alamitos Retarding Basin, are pumped to the San Gabriel River Estuary (SGR Estuary) through pumps and subterranean piping. The pumps and discharge point are located in the County of Los Angeles.

The OCFCD pumps the water within the Los Alamitos Retarding Basin to the San Gabriel River Estuary through four discharge pipes, which are covered by tide gates. The discharge point is located approximately 700 feet downstream from the 2nd Street Bridge in Long Beach. The total pumping capacity of the four pumps is 800 cubic feet

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per second (cfs). There is also a 5 cfs sump pump that discharges nuisance flow continuously to the Estuary through a smaller diameter uncovered pipe.

The discharge from the Los Alamitos Retarding Basin is covered under the Orange County Municipal NPDES Storm Water Permit (NPDES Permit No. CAS618030, Santa Ana Regional Water Quality Control Board Order No. R8-2010-0062), which was issued to the County of Orange, Orange County Flood Control District and Incorporated Cities on May 22, 2009. The Orange County MS4 Permit references the San Gabriel River Metals and Selenium TMDL (Metals TMDL). The waste load allocations listed in the Metals TMDL for Coyote Creek are included in the Orange County MS4 Permit. However, the Orange County MS4 Permit does not contain the dry weather copper waste load allocations assigned to the Estuary.

G. Legal Authorities

This Order is issued pursuant to CWA section 402 and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). This Order serves as an NPDES permit for point source discharges from the ~~Los Angeles County Permittees'~~ MS4s to surface waters. This Order also serves as waste discharge requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with Section 13260).

H. Municipal Separate Storm Sewer System Requirements. The 1972 Clean Water Act² established the NPDES Program to regulate the discharge of pollutants from point sources to waters of the United States. However, pollution from storm water and dry-weather urban runoff was largely unabated for over a decade. In response to the 1987 Amendments to the Clean Water Act, USEPA developed Phase I of the NPDES Storm Water Permitting Program in 1990, which established a framework for regulating municipal and industrial discharges of storm water and non-storm water. The Phase I program addressed sources of storm water and dry-weather urban runoff that had the greatest potential to negatively impact water quality. In particular, under Phase I, USEPA required NPDES Permit coverage for discharges from medium and large MS4 with populations of 100,000 or more. Operators of MS4s regulated under the Phase I NPDES Storm Water Program were required to obtain permit coverage for municipal discharges of storm water and non-storm water to waters of the United States

Early in the history of ~~the this LA County~~ MS4 Permit, the Regional Water Board designated the MS4s owned and/or operated by the incorporated cities and Los Angeles County unincorporated areas within the ~~LACFGD Coastal Watersheds of Los Angeles County~~ as a large MS4 due to the total population of Los Angeles County, including that of unincorporated and incorporated areas, and the interrelationship between the ~~Permittees'~~ MS4s throughout the ~~LACFGD~~, pursuant to 40 CFR section 122.26(b)(4). The total population of the cities and County unincorporated areas covered by this Order was 9,519,338 in 2000 and has increased by approximately 300,000 to 9,818,605 in 2010, according to the United States Census.

² Federal Water Pollution Control Act; 33 U.S.C. § 1251 et seq., which, as amended in 1977, is commonly known as the Clean Water Act.

This Order implements the federal Phase I NPDES Storm Water Program requirements. These requirements include three fundamental elements: (i) a requirement to effectively prohibit non-storm water discharges through the MS4, (ii) requirements to implement controls to reduce the discharge of pollutants to the maximum extent practicable, and (iii) other provisions ~~that the Regional Water Board has determined~~ necessary appropriate for the control of such pollutants in MS4 discharges in order to achieve water quality standards.

- I. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the Permittees' applications, through monitoring and reporting programs, and other available information. In accordance with federal regulations at 40 CFR section 124.8, a Fact Sheet (Attachment F) has been prepared to explain the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing this Order. The Fact Sheet is hereby incorporated into this Order and also constitutes part of the Findings of the Regional Water Board for this Order. Attachments A through E and G through R are also incorporated into this Order.
- J. Water Quality Control Plans.** The Clean Water Act requires the Regional Water Board to establish water quality standards for each water body in its region. Water quality standards include beneficial uses, water quality objectives and criteria that are established at levels sufficient to protect those beneficial uses, and an antidegradation policy to prevent degrading waters. The Regional Water Board adopted a *Water Quality Control Plan - Los Angeles Region* (hereinafter Basin Plan) on June 13, 1994 and has amended it on multiple occasions since 1994. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters in the Los Angeles Region. Pursuant to California Water Code section 13263(a), the requirements of this Order implement the Basin Plan. Beneficial uses applicable to the surface water bodies that receive discharges from the Los Angeles County MS4 generally include those listed below.

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Table 6. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Uses
All Municipal Separate Storm Sewer Systems (MS4s) discharge points within the Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the Los Angeles County Flood Control District with the exception of the City of Long Beach	Multiple surface water bodies of the Los Angeles Region	Municipal and Domestic Supply (MUN); Agricultural Supply (AGR); Industrial Service Supply (IND); Industrial Process Supply (PROC); Ground Water Recharge (GWR); Freshwater Replenishment (FRSH); Navigation (NAV); Hydropower Generation (POW); Water Contact Recreation (REC-1); Limited Contact Recreation (LREC-1); Non-Contact Water Recreation (REC-2); Commercial and Sport Fishing (COMM); Warm Freshwater Habitat (WARM); Cold Freshwater Habitat (COLD); Preservation of Areas of Special Biological Significance (BIOL); Wildlife Habitat (WILD); Preservation of Rare and Endangered Species (RARE); Marine Habitat (MAR); Wetland Habitat (WET); Migration of Aquatic Organisms (MIGR); Spawning, Reproduction, and/or Early Development (SPWN); Shellfish Harvesting (SHELL)

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1. Total Maximum Daily Loads (TMDLs)

Clean Water Act section 303(d)(1) requires each state to identify the waters within its boundaries that do not meet water quality standards. Water bodies that do not meet water quality standards are considered impaired and are placed on the state’s “CWA Section 303(d) List”. For each listed water body, the state is required to establish a TMDL of each pollutant impairing the water quality standards in that water body. A TMDL is a tool for implementing water quality standards and is based on the relationship between pollution sources and in-stream water quality conditions. The TMDL establishes the allowable pollutant loadings for a water body and thereby provides the basis to establish water quality-based controls. These controls should provide the pollution reduction necessary for a water body to meet water quality standards. A TMDL is the sum of the allowable pollutant loads of a single pollutant from all contributing point sources (the waste load allocations or WLAs) and non-point sources (load allocations or LAs), plus the contribution from background sources and a margin of safety. (40 CFR section 130.2(i).) MS4 discharges are considered point source discharges.

Numerous receiving waters within Los Angeles County do not meet water quality standards or fully support beneficial uses and therefore have been classified as impaired on the State’s 303(d) List. The Regional Water Board and USEPA have each established TMDLs to address many of these water quality impairments. Pursuant to CWA section 402(p)(B)(3)(iii) and 40 CFR section 122.44(d)(1)(vii)(B), this Order includes requirements that are consistent with and implement WLAs that are assigned to discharges from the Los Angeles County MS4 from 33 State-adopted and USEPA established TMDLs. This Order requires Permittees to comply with the TMDL Provisions in Part VI.E and Attachments L through R, which are

consistent with the assumptions and requirements of the TMDL WLAs assigned to discharges from the Los Angeles County MS4. A comprehensive list of TMDLs by watershed management area and the Permittees subject to each TMDL is included in Attachment K.

Waste load allocations in these TMDLs are expressed in several ways depending on the nature of the pollutant and its impacts on receiving waters and beneficial uses. Bacteria WLAs assigned to MS4 discharges are expressed as the number of allowable exceedance days that a water body may exceed the Basin Plan water quality objectives for protection of the REC-1 beneficial use. Since the TMDLs and the WLAs contained therein are expressed as receiving water conditions, receiving water limitations have been included in this Order that are consistent with and implement the allowable exceedance day WLAs. Water quality-based effluent limitations are also included equivalent to the Basin Plan water quality objectives to allow the opportunity for Permittees to individually demonstrate compliance at an outfall or jurisdictional boundary, thus isolating the Permittee's pollutant contributions from those of other Permittees and from other pollutant sources to the receiving water.

WLAs for trash are expressed as progressively decreasing allowable amounts of trash discharges from a Permittee's jurisdictional area within the drainage area to the impaired water body. The Trash TMDLs require each Permittee to make annual reductions of its discharges of trash over a set period, until the numeric target of zero trash discharged from the MS4 is achieved. The Trash TMDLs specify a specific formula for calculating and allocating annual reductions in trash discharges from each jurisdictional area within a watershed. The formula results in specified annual amounts of trash that may be discharged from each jurisdiction into the receiving waters. Translation of the WLAs or compliance points described in the TMDLs into jurisdiction-specific load reductions from the baseline levels, as specified in the TMDL, logically results in the articulation of an annual limitation on the amount of a pollutant that may be discharged. The specification of allowable annual trash discharge amounts meets the definition of an "effluent limitation", as that term is defined in subdivision (c) of section 13385.1 of the California Water Code. Specifically, the trash discharge limitations constitute a "numeric restriction ... on the quantity [or] discharge rate ... of a pollutant or pollutants that may be discharged from an authorized location."

TMDL WLAs for other pollutants (e.g., metals and toxics) are expressed as concentration and/or mass and water quality-based effluent limitations have been specified consistent with the expression of the WLA, including any applicable averaging periods. Some TMDLs specify that, if certain receiving water conditions are achieved, such achievement constitutes attainment of the WLA. In these cases, receiving water limitations and/or provisions outlining these alternate means of demonstrating compliance are included in the TMDL provisions in Part VI.E of this Order.

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The inclusion of water quality-based effluent limitations and receiving water limitations to implement applicable WLAs provides a clear means of identifying required water quality outcomes within the permit and ensures accountability by Permittees to implement actions necessary to achieve the limitations.

A number of the TMDLs for bacteria, metals, and toxics establish WLAs that are assigned jointly to a group of Permittees whose storm water and/or non-storm water discharges are or may be commingled in the MS4 prior to discharge to the receiving water subject to the TMDL. TMDLs address commingled MS4 discharges by assigning a WLA to a group of MS4 Permittees based on co-location within the same subwatershed. Permittees with co-mingled MS4 discharges are jointly responsible for meeting the water quality-based effluent limitations and receiving water limitations assigned to MS4 discharges in this Order. "Joint responsibility" means that the Permittees that have commingled MS4 discharges are responsible for implementing programs in their respective jurisdictions, or within the MS4 for which they are an owner and/or operator, to meet the water quality-based effluent limitations and/or receiving water limitations assigned to such commingled MS4 discharges.

In these cases, federal regulations state that co-permittees need only comply with permit conditions relating to discharges from the MS4 for which they are owners or operators (40 CFR § 122.26(a)(3)(vi)). Individual co-permittees are only responsible for their contributions to the commingled MS4 discharge. This Order does not require a Permittee to individually ensure that a commingled MS4 discharge meets the applicable water quality-based effluent limitations included in this Order, unless such Permittee is shown to be solely responsible for an exceedance.

Additionally, this Order allows a Permittee to clarify and distinguish their individual contributions and demonstrate that its MS4 discharge did not cause or contribute to exceedances of applicable water quality-based effluent limitations and/or receiving water limitations. If such a demonstration is made, though the Permittee's discharge may commingle with that of other Permittees, the Permittee would not be held jointly responsible for the exceedance of the water quality-based effluent limitation or receiving water limitation. Individual co-permittees who demonstrate compliance with the water quality-based effluent limitations will not be held responsible for violations by non-compliant co-permittees.

Given the interconnected nature of the ~~Los Angeles County~~ Permittees' MS4s, however, the Regional Water Board expects Permittees to work cooperatively to control the contribution of pollutants from one portion of the MS4 to another portion of the system through inter-agency agreements or other formal arrangements.

- K. Ocean Plan.** In 1972, the State Water Resources Control Board (State Water Board) adopted the Water Quality Control Plan for Ocean Waters of California, California Ocean Plan (hereinafter Ocean Plan). The State Water Board adopted the most recent amended Ocean Plan on September 15, 2009. The Office of Administration Law

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approved it on March 10, 2010. On October 8, 2010, USEPA approved the 2009 Ocean Plan. The Ocean Plan is applicable, in its entirety, to the ocean waters of the State. In order to protect beneficial uses, the Ocean Plan establishes water quality objectives and a program of implementation. Pursuant to California Water Code section 13263(a), the requirements of this Order implement the Ocean Plan. The Ocean Plan identifies beneficial uses of ocean waters of the State to be protected as summarized in the table below.

Table 7. Ocean Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Uses
All Municipal Separate Storm Sewer Systems (MS4s) discharge points within the Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the Los Angeles County Flood Control District with the exception of the City of Long Beach	Pacific Ocean	Industrial Water Supply (IND); Water Contact (REC-1) and Non-Contact Recreation (REC-2), including aesthetic enjoyment; Navigation (NAV); Commercial and Sport Fishing (COMM); Mariculture; Preservation and Enhancement of Designated Areas of Special Biological Significance (ASBS); Rare and Endangered Species (RARE); Marine Habitat (MAR); Fish Migration (MIGR); Fish Spawning (SPWN) and Shellfish Harvesting (SHELL)

L. Antidegradation Policy

40 CFR section 131.12 requires that state water quality standards include an antidegradation policy consistent with the federal antidegradation policy. The State Water Board established California’s antidegradation policy in State Water Board Resolution No. 68-16 (“Statement of Policy with Respect to Maintaining the Quality of the Waters of the State”). Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board’s Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. The permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.

M. Anti-Backsliding Requirements. Section 402(o)(2) of the CWA and federal regulations at 40 CFR section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations or other conditions in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations or conditions may be relaxed. All effluent limitations and conditions in this

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Order are at least as stringent as the effluent limitations and conditions in the previous permit.

N. Endangered Species Act. This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code, §§ 2050 to 2115.5) or the Federal Endangered Species Act (16 U.S.C.A., §§ 1531 to 1544). This Order requires compliance with requirements to protect the beneficial uses of waters of the United States. Permittees are responsible for meeting all requirements of the applicable Endangered Species Act.

O. Monitoring and Reporting. Section 308(a) of the federal Clean Water Act, and 40 CFR sections 122.41(h), (j)-(l), 122.41(i), and 122.48, requires that all NPDES permits specify monitoring and reporting requirements for recording and reporting monitoring results. Federal regulations applicable to large and medium MS4s also specify additional monitoring and reporting requirements. (40 C.F.R. §§ 122.26(d)(2)(i)(F) & (d)(2)(iii)(D), 122.42(c).) California Water Code sections 13267 and 13383 authorizes the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring, and reporting, and recordkeeping requirements to that implement the federal and State laws and/or requirements regulations. This Monitoring and Reporting Program is provided in Attachment E.

P. Standard and Special Provisions. Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR section 122.42, are provided in Attachment D. Dischargers must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR section 122.42 provided in Attachment D. The Regional Water Board has also included in Part VI of this Order various special provisions applicable to the Dischargers. A rationale for the various special provisions contained in this Order is provided in the attached Fact Sheet (Attachment F).

Q. Unfunded Mandates

Article XIII B, Section 6(a) of the California Constitution provides that whenever “any state agency mandates a new program or higher level of service on any local government, the state shall provide a subvention of funds to reimburse that local government for the costs of the program or increased level of service.” The requirements of this Order do not constitute state mandates that are subject to a subvention of funds for several reasons as described in detail in the attached Fact Sheet (Attachment F).

Q.R. Economic Considerations. The California Supreme Court has ruled that although California Water Code section 13263 requires the State and Regional Water Boards (collectively, Water Boards) to consider the factors set forth in California Water Code section 13241 when issuing an NPDES permit, the Water Boards may not consider the

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factors to justify imposing pollutant restriction that are less stringent than the applicable federal regulations require. (*City of Burbank v. State Water Resources Control Bd.* (2005) 35 Cal.4th 613, 618, 626-627). However, when the pollutant restrictions in an NPDES permit are more stringent than federal law requires, California Water Code section 13263 requires that the Water Boards consider the factors described in section 13241 as they apply to those specific restrictions. As noted in the preceding finding, the Regional Water Board finds that the requirements in this permit are not more stringent than the minimum federal requirements. Therefore, a 13241 analysis is not required for permit requirements that implement the effective prohibition on the discharge of non-storm water discharges into the MS4, or for controls to reduce the discharge of pollutants in storm water to the maximum extent practicable, or other provisions that the Regional Water Board has determined appropriate to control such pollutants, as those requirements are mandated by federal law. Notwithstanding the above, the Regional Water Board has developed an economic analysis of the permit's requirements, consistent with California Water Code section 13241. That analysis is provided in the Fact Sheet (Attachment F of this Order).

S.T. California Environmental Quality Act (CEQA). This action to adopt an NPDES Permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA) (Public Resources Code, § 21100, et seq.) pursuant to California Water Code section 13389. (*County of Los Angeles v. Cal. Water Boards* (2006) 143 Cal.App.4th 985.)

T.U. Notification of Interested Parties. In accordance with State and federal laws and regulations, the Regional Water Board has notified the Permittees and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharges authorized by this Order and has provided them with an opportunity to provide written and oral comments. Details of notification, as well as the meetings and workshops held on drafts of the permit, are provided in the Fact Sheet of this Order.

U.V. Consideration of Public Comment. The Regional Water Board, in a public meeting, heard and considered all oral and written comments pertaining to the discharges authorized by this Order and the requirements contained herein. The Regional Water Board has prepared written responses to all timely comments, which are incorporated by reference as part of this Order.

W. This Order serves as an NPDES permit pursuant to CWA section 402 or amendments thereto, and becomes effective fifty (50) days after the date of its adoption, provided that the Regional Administrator, USEPA, Region IX, expresses no objections.

X. This Order supersedes Order No. 01-182 as amended, except for enforcement purposes.

Y. Review by the State Water Board. Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must *receive* the petition by 5:00 p.m., 30 days after the Regional Water Board action, except that if the thirtieth day following the action falls on a Saturday, Sunday, or state holiday, the

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petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

THEREFORE, IT IS HEREBY ORDERED, that the Dischargers, in order to meet the provisions contained in Division 7 of the California Water Code (commencing with section 13000), and regulations, plans, and policies adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following requirements:

III. DISCHARGE PROHIBITIONS

A. Prohibitions – Non-Storm Water Discharges

1. **Prohibition of Non-Storm Water Discharges.** Each Permittee shall, for the portion of the MS4 for which it is an owner or operator, prohibit non-storm water discharges through the MS4 to receiving waters except where such discharges are either:
 - a. Authorized non-storm water discharges separately regulated by an individual or general NPDES permit;
 - b. Temporary non-storm water discharges authorized by USEPA³ pursuant to sections 104(a) or 104(b) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) that either: (i) will comply with water quality standards as applicable or relevant and appropriate requirements (“ARARs”) under section 121(d)(2) of CERCLA; or (ii) are subject to either (a) a written waiver of ARARs by USEPA pursuant to section 121(d)(4) of CERCLA or (b) a written determination by USEPA that compliance with ARARs is not practicable considering the exigencies of the situation pursuant to 40 CFR. section 300.415(j);
 - c. Authorized non-storm water discharges from emergency fire fighting activities (i.e., flows necessary for the protection of life or property)⁴;
 - d. Natural flows, including:
 - i. Natural springs;
 - ii. Flows from riparian habitats and wetlands;
 - iii. Diverted stream flows, authorized by the State or Regional Water Board;

³ These typically include short-term, high volume discharges resulting from the development or redevelopment of groundwater extraction wells, or USEPA or State-required compliance testing of potable water treatment plants, as part of a USEPA authorized groundwater remediation action under CERCLA.

⁴ Discharges from vehicle washing, building fire suppression system maintenance and testing (e.g., sprinkler line flushing), fire hydrant maintenance and testing, and other routine maintenance activities are not considered emergency fire fighting activities.

- iv. Uncontaminated ground water infiltration⁵;
 - v. Rising ground waters, where ground water seepage is not otherwise covered by a NPDES permit⁶; or
 - e. Conditionally exempt non-storm water discharges in accordance with Parts III.A.2 and III.A.3 below.
- 2. Conditional Exemptions from Non-Storm Water Discharge Prohibition.** The following categories of non-storm water discharges are conditionally exempt from the non-storm water discharge prohibition, provided they meet all required conditions specified below, or as otherwise approved by the Regional Water Board Executive Officer, in all areas regulated by this Order with the exception of direct discharges to Areas of Special Biological Significance (ASBS) within Los Angeles County. Conditional exemptions from the prohibition on non-storm water discharges through the MS4 to an ASBS are identified in Part III.A.3 below.
- a. **Conditionally Exempt Essential Non-Storm Water Discharges:** These consist of those discharges that fall within one of the categories below; meet all required best management practices (BMPs) as specified in i. and ii. below, including those enumerated in the referenced BMP manuals; are essential public services discharge activities; and are directly or indirectly required by other state or federal statute and/or regulation:
 - i. Discharges from essential *non-emergency* fire fighting activities⁷ provided appropriate BMPs are implemented based on the CAL FIRE, Office of the State Fire Marshal's *Water-Based Fire Protection Systems Discharge Best Management Practices Manual* (September 2011) for water-based fire protection system discharges, and based on Riverside County's *Best Management Practices Plan for Urban Runoff Management* (May 1, 2004) or equivalent BMP manual for fire training activities and post-emergency fire fighting activities;
 - ii. Discharges from potable water sources, where not otherwise regulated by an individual or general NPDES permit⁸, provided appropriate BMPs are implemented based on the American Water Works Association (California-Nevada Section) *Guidelines for the Development of Your Best Management*

⁵ Uncontaminated ground water infiltration is water other than waste water that enters the MS4 (including foundation drains) from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow. (See 40 CFR § 35.2005(20).)

⁶ A NPDES permit for discharges associated with ground water dewatering is required within the Los Angeles Region.

⁷ This includes fire fighting training activities, which simulate emergency responses, and routine maintenance and testing activities necessary for the protection of life and property, including building fire suppression system maintenance and testing (e.g. sprinkler line flushing) and fire hydrant testing and maintenance. Discharges from vehicle washing are not considered essential and as such are not conditionally exempt from the non-storm water discharge prohibition.

⁸ Potable water distribution system releases means sources of flows from drinking water storage, supply and distribution systems (including flows from system failures), pressure releases, system maintenance, distribution line testing, and flushing and dewatering of pipes, reservoirs, and vaults, and minor non-invasive well maintenance activities not involving chemical addition(s) where not otherwise regulated by NPDES Permit No. CAG674001, NPDES Permit No. CAG994005, or an other separate NPDES permit.

Practices (BMP) Manual for Drinking Water System Releases (2005) or equivalent industry standard BMP manual. Additionally, each Permittee shall work with potable water suppliers that may discharge to the Permittee's MS4 to ensure for all discharges greater than 100,000 gallons: (1) notification at least 72 hours prior to a planned discharge and as soon as possible after an unplanned discharge; (2) monitoring of any pollutants of concern⁹ in the potable water supply release; and (3) record keeping by the potable water supplier ~~for all discharges greater than one acre-foot.~~¹⁰ Permittees shall require that the following information is maintained by the water supplier(s) for all discharges to the MS4 (planned and unplanned) greater than 100,000 gallons: name of discharger, date and time of notification (for planned discharges), method of notification, location of discharge, discharge pathway, receiving water, date of discharge, time of the beginning and end of the discharge, duration of the discharge, flow rate or velocity, total number of gallons discharged, type of dechlorination equipment used, type of dechlorination chemicals used, concentration of residual chlorine, type(s) of sediment controls used, pH of discharge, type(s) of volumetric and velocity controls used, and field and laboratory monitoring data. Records shall be retained for five years and made available upon request by the Permittee or Regional Water Board.

- b.** Those discharges that fall within one of the categories below, provided that the discharge itself is not a source of pollutants and meets all required conditions specified in Table 8 or as otherwise specified or approved by the Regional Water Board Executive Officer:
- i.** Dewatering of lakes¹¹;
 - ii.** Landscape irrigation;
 - iii.** Dechlorinated/debrominated swimming pool/spa discharges¹², where not otherwise regulated by a separate NPDES permit;
 - iv.** Dewatering of decorative fountains¹³;

⁹ Pollutants of concern may include, at a minimum, trash and debris, including organic matter, total suspended solids (TSS), residual chlorine, pH, and any pollutant for which there is a water quality-based effluent limitation in Part VI.E applicable to discharges from the MS4 to the receiving water.

¹⁰ ~~Permittees shall require that the following information is maintained by the water supplier(s) for all discharges (planned and unplanned) greater than one acre-foot: name of discharger, date and time of notification (for planned discharges), method of notification, location of discharge, discharge pathway, receiving water, date of discharge, time of the beginning and end of the discharge, duration of the discharge, flow rate or velocity, total number of gallons discharged, type of dechlorination equipment used, type of dechlorination chemicals used, concentration of residual chlorine, type(s) of sediment controls used, pH of discharge, type(s) of volumetric and velocity controls used, and field and laboratory monitoring data. Records shall be retained for five years and made available upon request by the Permittee or Regional Water Board.~~

¹¹ Dewatering of lakes does not include dewatering of drinking water reservoirs. Dewatering of drinking water reservoirs is addressed in Section III.A.2.a.ii.

¹² Conditionally exempt dechlorinated/debrominated swimming pool/spa discharges do not include swimming pool/spa filter backwash or swimming pool/spa water containing bacteria, detergents, wastes, or algaecides, or any other chemicals including salts from pools commonly referred to as "salt water pools" in excess of applicable water quality objectives.

- v. Non-commercial car washing by residents or by non-profit organizations;
 - vi. Street/sidewalk wash water¹⁴.
- 3. Conditional Exemptions from Non-Storm Water Discharge Prohibition within an ASBS.** The following non-storm water discharges ~~through~~from the MS4 directly to an ASBS are conditionally exempt pursuant to the California Ocean Plan as specified below, provided that:
- a. The discharges are essential for emergency response purposes, structural stability, slope stability or occur naturally, including the following discharges:
 - i. Discharges associated with emergency fire fighting activities (i.e., flows necessary for the protection of life or property)¹⁵;
 - ii. Foundation and footing drains;
 - iii. Water from crawl space or basement pumps;
 - iv. Hillside dewatering;
 - v. Naturally occurring ground water seepage via a MS4; and
 - vi. Non-anthropogenic flows from a naturally occurring stream via a culvert or MS4, as long as there are no contributions of anthropogenic runoff.
 - b. The discharges fall within one of the conditionally exempt essential non-storm water discharge categories in Part III.A.2.a. above.
 - c. Conditionally exempt non-storm water discharges shall not cause or contribute¹⁶ to an exceedance of applicable receiving water limitations and/or water quality-based effluent limitations in this Order or the water quality objectives in Chapter II of the Ocean Plan, or alter natural ocean water quality in an ASBS.
- 4. Permittee Requirements.** Each Permittee shall:
- a. Develop and implement procedures to ensure that a discharger, if not a named Permittee in this Order, fulfills the following for non-storm water discharges to the Permittee's MS4:

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¹³ Conditionally exempt discharges from dewatering of decorative fountains do not include fountain water containing bacteria, detergents, wastes, or algacides, or any other chemicals in excess of applicable water quality objectives.

¹⁴ Conditionally exempt non-storm water discharges of street/sidewalk wash water only include those discharges resulting from use of high pressure, low volume spray washing using only potable water with no cleaning agents at an average usage of 0.006 gallons per square feet of sidewalk area in accordance with Regional Water Board Resolution No. 98-08. Conditionally exempt non-storm water discharges of street/sidewalk wash water do not include hosing of any sidewalk or street with a garden hose with a pressure nozzle.

¹⁵ See note 4.

¹⁶ Based on the water quality characteristics of the conditionally exempt non-storm water discharge itself.

- i. Notifies the Permittee of the planned discharge in advance, consistent with requirements in Table 8 or recommendations pursuant to the applicable BMP manual;
 - ii. Obtains any local permits required by the MS4 owner(s) and/or operator(s);
 - iii. Provides documentation that it has obtained any other necessary permits or water quality certifications¹⁷ for the discharge;
 - iv. Conducts monitoring of the discharge, if required by the Permittee;
 - v. Implements BMPs and/or control measures as specified in Table 8 or in the applicable BMP manual(s) as a condition of the approval to discharge into the Permittee's MS4; and
 - vi. Maintains records of its discharge to the MS4, consistent with requirements in Table 8 or recommendations pursuant to the applicable BMP manual. For lake dewatering, Permittees shall require that the following information is maintained by the lake owner / operator: name of discharger, date and time of notification, method of notification, location of discharge, discharge pathway, receiving water, date of discharge, time of the beginning and end of the discharge, duration of the discharge, flow rate or velocity, total number of gallons discharged, type(s) of sediment controls used, pH of discharge, type(s) of volumetric and velocity controls used, and field and laboratory monitoring data. Records shall be made available upon request by the Permittee or Regional Water Board.
- b. Develop and implement procedures that minimize the discharge of landscape irrigation water into the MS4 by promoting conservation programs.
- i. Permittees shall coordinate with the local water purveyor(s), where applicable, to promote landscape water use efficiency requirements for existing landscaping, use of drought tolerant, native vegetation, and the use of less toxic options for pest control and landscape management.
 - ii. Permittees shall develop and implement a coordinated outreach and education program to minimize the discharge of irrigation water and pollutants associated with irrigation water consistent with Part VI.D.4.c of this Order (Public Information and Participation Program).
- c. Evaluate monitoring data collected pursuant to the Monitoring and Reporting Program (MRP) of this Order (Attachment E), and any other associated data or information, and determine whether any of the authorized or conditionally exempt non-storm water discharges identified in Parts III.A.1, III.A.2, and III.A.3 above are a source of pollutants that may be causing or contributing to

¹⁷ Pursuant to the Federal Clean Water Act § 401.

an exceedance of applicable receiving water limitations in Part V and/or water quality-based effluent limitations in Part VI.E. To evaluate monitoring data, the Permittee shall either use applicable interim or final water quality-based effluent limitations for the pollutant or, if there are no applicable interim or final water quality-based effluent limitations for the pollutant, use applicable action levels provided in Attachment G. Based on non-storm water outfall-based monitoring as implemented through the MRP, if monitoring data show exceedances of applicable water quality-based effluent limitations or action levels, the Permittee shall take further action to determine whether the discharge is causing or contributing to exceedances of receiving water limitations in Part V.

- d. If the Permittee determines that any of the conditionally exempt non-storm water discharges identified in Part III.A.2.b above is a source of pollutants that causes or contributes to an exceedance of applicable receiving water limitations and/or water quality-based effluent limitations, the Permittee(s) shall report its findings to the Regional Water Board in its annual report. Based on this determination, the Permittee(s) shall also either:
 - i. Effectively prohibit¹⁸ the non-storm water discharge to the MS4; or
 - ii. Impose conditions in addition to those in Table 8, subject to approval by the Regional Water Board Executive Officer, on the non-storm water discharge such that it will not be a source of pollutants; or
 - iii. Provide for diversion of the non-storm water discharge to the sanitary sewer; or
 - iv. Provide treatment of the non-storm water discharge prior to discharge to the receiving water.
- e. If the Permittee determines that any of the authorized or conditionally exempt essential non-storm water discharges identified in Parts III.A.1.a through III.A.1.c, III.A.2.a, or III.A.3 above is a source of pollutants that causes or contributes to an exceedance of applicable receiving water limitations and/or water quality-based effluent limitations, the Permittee shall notify the Regional Water Board within 30 days if the non-storm water discharge is an authorized discharge with coverage under a separate NPDES permit or authorized by USEPA under CERCLA in the manner provided in Part III.A.1.b above, or a conditionally exempt essential non-storm water discharge or emergency non-storm water discharge.
- f. If the Permittee prohibits the discharge from the MS4, as per Part III.A.4.d.i, then the Permittee shall implement procedures developed under Part VI.D.9

¹⁸ To "effectively prohibit" means to not allow the non-storm water discharge through the MS4 unless the discharger obtains coverage under a separate NPDES permit prior to discharge to the MS4.

(Illicit Connections and Illicit Discharges Elimination Program) in order to eliminate the discharge to the MS4.

5. If a Permittee demonstrates that the water quality characteristics of a specific authorized or conditionally exempt essential non-storm water discharge resulted in an exceedance of applicable receiving water limitations and/or water quality-based effluent limitations during a specific sampling event, the Permittee shall not be found in violation of applicable receiving water limitations and/or water quality-based effluent limitations for that specific sampling event. Such demonstration must be based on source specific water quality monitoring data from the authorized or conditionally exempt essential non-storm water discharge ~~and or~~ other relevant information documenting the characteristics of regarding the specific non-storm water discharge as identified in Table 8.

6. Notwithstanding the above, the Regional Water Board Executive Officer, based on an evaluation of monitoring data and other relevant information for specific categories of non-storm water discharges, may modify a category or remove categories of conditionally exempt non-storm water discharges from Parts III.A.2 and III.A.3 above if the Executive Officer determines that a discharge category is a source of pollutants that causes or contributes to an exceedance of applicable receiving water limitations and/or water quality-based effluent limitations, or may require that a discharger obtain coverage under a separate individual or general State or Regional Water Board permit for a non-storm water discharge.

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Table 8. Required Conditions for Conditionally Exempt Non-Storm Water Discharges

Discharge Category	General Conditions Under Which Discharge Through the MS4 is Allowed	Conditions/BMPs that are Required to be Implemented Prior to Discharge Through the MS4
All Discharge Categories	See discharge specific conditions below.	<p>Ensure Segregate conditionally exempt non-storm water discharges from avoid potential sources of pollutants <u>in the flow path</u> to prevent introduction of pollutants to the MS4 and receiving water.</p> <p>1. Whenever there is a discharge of one acre-foot 100,000 gallons or more into the MS4, the Los Angeles County Flood Control District Permittees shall require advance notification by the discharger to the potentially affected MS4 Permittees, including at a minimum the District LACFCD, if applicable, and the Permittee with jurisdiction over the land area from which the discharge originates.</p>
Dewatering of lakes	Discharge allowed only if all necessary permits/water quality certifications for dredge and fill activities, including water diversions, are obtained prior to discharge.	<p>Ensure procedures for advanced notification by the lake owner / operator to the Permittee(s) no less than 72 hours prior to the planned discharge.</p> <p>Immediately prior to discharge, visible trash on the shoreline or on the surface of the lake shall be removed and disposed of in a legal manner.</p> <p>Immediately prior to discharge, the discharge pathway, and the MS4 inlet to which the discharge is directed, <u>and the MS4 inlet to which the discharge is directed,</u> and the MS4 outlet from which the water will be discharged to the receiving water, shall be inspected and cleaned out.</p> <p>Discharges shall be volumetrically and velocity controlled to minimize resuspension of sediments.</p> <p>Measures shall be taken to stabilize lake bottom sediments.</p> <p>Ensure procedures for water quality monitoring for pollutants of concern¹⁹ in the lake.</p> <p>Ensure record-keeping of lake dewatering by the lake owner / operator.²⁰</p>

¹⁹ Pollutants of concern include, at a minimum, trash and debris, including organic matter, TSS, and any pollutant for which there is a water quality-based effluent limitation in Part VI.E for the lake and/or receiving water.

²⁰ ~~Permittees shall require that the following information is maintained by the lake owner / operator: name of discharger, date and time of notification, method of notification, location of discharge, discharge pathway, receiving water, date of discharge, time of the beginning and end of the discharge, duration of the discharge, flow rate or velocity, total number of gallons discharged, type(s) of sediment controls used, pH of discharge, type(s) of volumetric and velocity controls used, and field and laboratory monitoring data. Records shall be made available upon request by the Permittee or Regional Water Board.~~

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<p>Landscape irrigation using potable water</p>	<p>Discharge allowed if runoff due to potable landscape irrigation is minimized through the implementation of an ordinance specifying water efficient landscaping standards, as well as an outreach and education program focusing on water conservation and landscape water use efficiency.</p>	<p>Implement BMPs to minimize runoff and prevent introduction of pollutants to the MS4 and receiving water. Implement water conservation programs to minimize discharge by using less water.</p>
<p>Landscape irrigation using reclaimed or recycled water</p>	<p>Discharge of reclaimed or recycled water runoff from landscape irrigation is allowed if the discharge is in compliance with the producer and distributor operations and management (O&M) plan, and all relevant portions thereof, including the Irrigation Management Plan.</p>	<p>Discharges must comply with applicable O&M Plans, and all relevant portions thereof, including the Irrigation Management Plan.</p>

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<p>Dechlorinated/ debrominated swimming pool/spa discharges</p>	<p>Discharges allowed after implementation of specified BMPs.</p> <p>Pool or spa water containing copper-based algaecides is not allowed to be discharged to the MS4.</p> <p>Discharges of cleaning waste water and filter backwash allowed only if authorized by a separate NPDES permit.</p>	<p>Implement BMPs and segregate <u>ensure</u> discharge from <u>avoids</u> potential sources of pollutants <u>in the flow path</u> to prevent introduction of pollutants prior to discharge to the MS4 and receiving water.</p> <p>Swimming pool water must be dechlorinated or debrominated using holding time, aeration, and/or sodium thiosulfate. Chlorine residual in the discharge shall not exceed 0.1 mg/L.</p> <p>Swimming pool water shall not contain any detergents, wastes, or algaecides, or any other chemicals including salts from pools commonly referred to as “salt water pools” in excess of applicable water quality objectives.²¹</p> <p>Swimming pool discharges are to be pH adjusted, if necessary, and be within the range of 6.5 and 8.5 standard units.</p> <p>Swimming pool discharges shall be volumetrically and velocity controlled to promote evaporation and/or infiltration.</p> <p>Ensure procedures for advanced notification by the pool owner to the Permittee(s) at least 72 hours prior to planned discharge for discharges of one acre-foot <u>100,000 gallons</u> or more.</p> <p>II. Immediately prior to discharge, the discharge pathway, <u>and</u> the MS4 inlet to which the discharge is directed, and the MS4 outlet from which the water will be discharged to the receiving water, shall be inspected and cleaned out.</p>
<p>Dewatering of decorative fountains</p>	<p>Discharges allowed after implementation of specified BMPs.</p> <p>Fountain water containing copper-based algaecides may not be discharged to the MS4.</p> <p>Fountain water containing dyes may not be discharged to the MS4.</p>	<p>Implement BMPs and segregate <u>ensure</u> discharge <u>avoids</u> from potential sources of pollutants <u>in the flow path</u> to prevent introduction of pollutants prior to discharge to the MS4 and receiving water.</p> <p>Fountain water must be dechlorinated or debrominated using holding time, aeration, and/or sodium thiosulfate. Chlorine residual in the discharge shall not exceed 0.1 mg/L.</p> <p>Fountain discharges are to be pH adjusted, if necessary, and be within the range of 6.5 and 8.5 standard units.</p> <p>Fountain discharges shall be volumetrically and velocity controlled to promote evaporation and/or infiltration.</p> <p>Ensure procedures for advanced notification by the fountain owner to the Permittee(s) at least 72 hours prior to planned discharge for discharges of one acre-foot <u>100,000 gallons</u> or more.</p> <p>III. Immediately prior to discharge, the discharge pathway, <u>and</u> the MS4 inlet to which the discharge is directed, and the MS4 outlet from which the water will be discharged to the receiving</p>

²¹ Applicable mineral water quality objectives for surface waters are contained in Chapter 3 of the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties.

		water, shall be inspected and cleaned out.
Non-commercial car washing by residents or by non-profit organizations	Discharges allowed after implementation of specified BMPs.	<p>Implement BMPs and segregate <u>ensure</u> discharge <u>avoids from</u> potential sources of pollutants <u>in the flow path</u> to prevent introduction of pollutants prior to discharge to the MS4 and receiving water.</p> <p>Minimize the amount of water used by employing water conservation practices such as turning off nozzles or kinking the hose when not spraying a car, and using a low volume pressure washer.</p> <p>Encourage use of biodegradable, phosphate free detergents and non-toxic cleaning products.</p> <p>Where possible, wash cars on a permeable surface where wash water can percolate into the ground (e.g. gravel or grassy areas).</p> <p>Empty buckets of soapy or rinse water into the sanitary sewer system (e.g., sinks or toilets).</p>
Street/sidewalk wash water	Discharges allowed after implementation of specified BMPs.	<p>Sweeping should be used as an alternate BMP whenever possible and sweepings should be disposed of in the trash.</p> <p>BMPs shall be in accordance with Regional Water Board Resolution No. 98-08 that requires: 1) removal of trash, debris, and free standing oil/grease spills/leaks (use absorbent material if necessary) from the area before washing and 2) use of high pressure, low volume spray washing using only potable water with no cleaning agents at an average usage of 0.006 gallons per square feet of sidewalk area. In areas of unsanitary conditions (e.g., areas where the congregation of transient populations can reasonably be expected to result in a significant threat to water quality), whenever practicable, Permittees shall collect and divert street and alley wash water from the Permittee's street and sidewalk cleaning public agency activities to the sanitary sewer.</p>

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IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations

1. **Technology Based Effluent Limitations:** Each Permittee shall reduce pollutants in storm water discharges from the MS4 to the maximum extent practicable (MEP).
2. **Water Quality-Based Effluent Limitations (WQBELs).** This Order establishes WQBELs consistent with the assumptions and requirements of all available TMDL waste load allocations assigned to discharges from the Los Angeles County Permittees' MS4s.
 - a. Each Permittee shall comply with applicable WQBELs as set forth in Part VI.E of this Order, pursuant to applicable compliance schedules.

B. Land Discharge Specifications – Not Applicable

C. Reclamation Specifications – Not Applicable

V. RECEIVING WATER LIMITATIONS

A. Receiving Water Limitations

1. Discharges from the MS4 that cause or contribute to the violation of receiving water limitations are prohibited.
2. Discharges from the MS4 of storm water, or non-storm water, for which a Permittee is responsible²², shall not cause or contribute to a condition of nuisance.
3. The Permittees shall comply with Parts V.A.1 and V.A.2 through timely implementation of control measures and other actions to reduce pollutants in the discharges in accordance with the storm water management program and its components and other requirements of this Order including any modifications. The storm water management program and its components shall be designed to achieve compliance with receiving water limitations. If exceedances of receiving water limitations persist, notwithstanding implementation of the storm water management program and its components and other requirements of this Order, the Permittee shall assure compliance with discharge prohibitions and receiving water limitations by complying with the following procedure:
 - a. Upon a determination by either the Permittee or the Regional Water Board that discharges from the MS4 are causing or contributing to an exceedance of an applicable Receiving Water Limitation, the Permittee shall promptly notify²³ and thereafter submit an Integrated Monitoring Compliance Report (as described in the Program Reporting Requirements, Part XVIII.A.5 of the Monitoring and

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²² Pursuant to 40 CFR § 122.26(a)(3)(vi), a Permittee is only responsible for discharges of storm water and non-storm water from the MS4 for which it is an owner or operator.

²³ Within 30 days of receipt of analytical results from the sampling event.

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Reporting Program) to the Regional Water Board for approval. The Integrated Monitoring Compliance shall describe the BMPs that are currently being implemented by the Permittee and additional BMPs, including modifications to current BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the exceedances of receiving water limitations. The Integrated Monitoring Compliance Report shall include an implementation schedule. This Integrated Monitoring Compliance Report shall be incorporated in the annual Storm Water Report unless the Regional Water Board directs an earlier submittal. The Regional Water Board may require modifications to the Integrated Monitoring Compliance Report.

- b. The Permittee shall submit any modifications to the Integrated Monitoring Compliance Report required by the Regional Water Board within 30 days of notification.
 - c. Within 30 days following the Regional Water Board Executive Officer’s approval of the Integrated Monitoring Compliance Report, the Permittee shall revise the storm water management program and its components and monitoring program to incorporate the approved modified BMPs that have been and will be implemented, an implementation schedule, and any additional monitoring required.
 - d. The Permittee shall implement the revised storm water management program and its components and monitoring program according to the approved implementation schedule.
4. So long as the Permittee has complied with the procedures set forth in Part V.A.3. above and is implementing the revised storm water management program and its components, the Permittee does not have to repeat the same procedure for continuing or recurring exceedances of the same receiving water limitations unless directed by the Regional Water Board to modify current BMPs or develop additional BMPs.

B. Ground Water Limitations – Not Applicable

VI. PROVISIONS

A. Standard Provisions

- 1. **Federal Standard Provisions.** Each Permittee shall comply with all Standard Provisions included in Attachment D of this Order, in accordance with 40 CFR sections 122.41 and 122.42.
- 2. **Legal Authority**
 - a. Each Permittee must establish and maintain adequate legal authority, within its respective jurisdiction, to control pollutant discharges into and from its MS4

through ordinance, statute, permit, contract or similar means. This legal authority must, at a minimum, authorize or enable the Permittee to:

- i. Control the contribution of pollutants to its MS4 from storm water discharges associated with industrial and construction activity and control the quality of storm water discharged from industrial and construction sites. This requirement applies both to industrial and construction sites with coverage under an NPDES permit, as well as to those sites that do not have coverage under an NPDES permit. Grading ordinances must be updated and enforced as necessary to comply with this Order;
- ii. Prohibit all non-storm water discharges through the MS4 to receiving waters not otherwise authorized or conditionally exempt pursuant to Part III.A;
- iii. Prohibit and eliminate illicit discharges and illicit connections to the MS4;
- iv. Control the discharge of spills, dumping, or disposal of materials other than storm water to its MS4;
- v. Require compliance with conditions in Permittee ordinances, permits, contracts or orders (i.e., hold dischargers to its MS4 accountable for their contributions of pollutants and flows);
- vi. Utilize enforcement mechanisms to require compliance with applicable ordinances, permits, contracts, or orders;
- vii. Control the contribution of pollutants from one portion of the shared MS4 to another portion of the MS4 through interagency agreements among Co-permittees;
- viii. Control of the contribution of pollutants from one portion of the shared MS4 to another portion of the MS4 through interagency agreements with other owners of the MS4 such as the State of California Department of Transportation;
- ix. Carry out all inspections, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with applicable municipal ordinances, permits, contracts and orders, and with the provisions of this Order, including the prohibition of non-storm water discharges into the MS4 and receiving waters. This means the Permittee must have authority to enter, monitor, inspect, take measurements, review and copy records, and require regular reports from entities discharging into its MS4;
- x. Require the use of control measures to prevent or reduce the discharge of pollutants to achieve water quality standards/receiving water limitations;
- xi. Require that structural BMPs are properly operated and maintained; and

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- xii. Require documentation on the operation and maintenance of structural BMPs and their effectiveness in reducing the discharge of pollutants to the MS4.
- b. Each Permittee must submit a statement certified by its chief legal counsel that the Permittee has the legal authority within its jurisdiction to implement and enforce each of the requirements contained in 40 CFR § 122.26(d)(2)(i)(A-F) and this Order. Each Permittee shall submit this certification annually as part of its Annual Report beginning with the first Annual Report required under this Order. These statements must include:
- i. Citation of applicable municipal ordinances or other appropriate legal authorities and their relationship to the requirements of 40 CFR § 122.26(d)(2)(i)(A)-(F) and of this Order; and
 - ii. Identification of the local administrative and legal procedures available to mandate compliance with applicable municipal ordinances identified in subsection (i) above and therefore with the conditions of this Order, and a statement as to whether enforcement actions can be completed administratively or whether they must be commenced and completed in the judicial system.

3. Fiscal Resources

- ~~a. Each Permittee shall exercise its full authority to secure the fiscal resources necessary to meet all requirements of this Order.~~
- a. Each Permittee shall conduct a fiscal analysis of the annual capital and operation and maintenance expenditures necessary to implement the requirements of this Order. Each Permittee shall submit its fiscal analysis with its Report of Waste Discharge.
- b. Each Permittee shall also include enumerate and describe in its Annual Report a description of the source(s) of funds used in the past year, and proposed for the coming year, to meet necessary expenditures on the Permittee's storm water management program.
- ~~c. Each Permittee shall conduct a fiscal analysis of the annual capital and operation and maintenance expenditures necessary to implement the requirements of this Order. Each Permittee shall submit its fiscal analysis with its Report of Waste Discharge.~~

4. Responsibilities of the Permittees

- a. Each Permittee is required to comply with the requirements of this Order applicable to discharges within its boundaries. Permittees are not responsible for the implementation of the provisions applicable to other Permittees. Each Permittee shall:

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- i. Comply with the requirements of this Order and any modifications thereto.
- ii. Coordinate among its internal departments and agencies, as necessary, to facilitate the implementation of the requirements of this Order applicable to such Permittees in an efficient and cost-effective manner.
- iii. Participate in intra-agency coordination (e.g. Planning Department, Fire Department, Building and Safety, Code Enforcement, Public Health, Parks and Recreation, and others) and inter-agency coordination (e.g. co-Permittees, other NPDES permittees) necessary to successfully implement the provisions of this Order.

5. Public Review

- a. All documents submitted to the Regional Water Board in compliance with the terms and conditions of this Order shall be made available to members of the public pursuant to the Freedom of Information Act (5 U.S.C. § 552 (as amended)) and the Public Records Act (Cal. Government Code § 6250 et seq.).
- b. All documents submitted to the Regional Water Board Executive Officer for approval shall be made available to the public for a 30-day period to allow for public comment.

6. Regional Water Board Review

Any formal determination or approval made by the Regional Water Board Executive Officer pursuant to the provisions of this Order may be reviewed by the Regional Water Board. A Permittee(s) or a member of the public may request such review upon petition within 30 days of the effective date of the notification of such decision to the Permittee(s) and interested parties on file at the Regional Water Board.

7. Reopener and Modification

- a. This Order may be modified, revoked, reissued, or terminated in accordance with the provisions of 40 CFR sections 122.44, 122.62, 122.63, 122.64, 124.5, 125.62, and 125.64. Causes for taking such actions include, but are not limited to:
 - i. Endangerment to human health or the environment resulting from the permitted activity, including information that the discharge(s) regulated by this Order may have the potential to cause or contribute to adverse impacts on water quality and/or beneficial uses;
 - ii. Acquisition of newly-obtained information that would have justified the application of different conditions if known at the time of Order adoption;

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- iii. To address changed conditions identified in required reports or other sources deemed significant by the Regional Water Board;
 - iv. To incorporate provisions as a result of future amendments to the Basin Plan, such as a new or revised water quality objective or the adoption or reconsideration of a TMDL, including the program of implementation. Within 18 months of the effective date of a revised TMDL or as soon as practicable thereafter, where the revisions warrant a change to the provisions of this Order, the Regional Water Board may modify this Order consistent with the assumptions and requirements of the revised WLA(s), including the program of implementation;
 - v. To incorporate provisions as a result of new or amended statewide water quality control plans or policies adopted by the State Water Board, or in consideration of any State Water Board action regarding the precedential language of State Water Board Order WQ 99-05;
 - vi. To incorporate provisions as a result of the promulgation of new or amended federal or state laws or regulations, USEPA guidance concerning regulated activities, or judicial decisions that becomes effective after adoption of this Order.
 - vii. To incorporate effluent limitations for toxic constituents determined to be present in significant amount in the discharge through a more comprehensive monitoring program included as part of this Order and based on the results of the reasonable potential analysis; ~~and/or~~
 - viii. In accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include requirements for the implementation of the watershed management approach or to include new Minimum Levels (MLs); and/or
 - viii.ix. To include provisions or modifications to WQBELs in Part VI.E and Attachments L-R in this Order prior to the final compliance deadlines, if practicable, that would allow an action-based, BMP compliance demonstration approach with regard to final WQBELs for storm water discharges based on the Regional Board's review of relevant research, including but not limited to data and information provided by Permittees, on storm water quality and control technologies.
- b. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
- i. Violation of any term or condition contained in this Order;
 - ii. Obtaining this Order by misrepresentation, or failure to disclose all relevant facts; or

- iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
 - c. The filing of a request by a Permittee for a modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.
 - d. This Order may be modified to make corrections or allowances for changes in the permitted activity, following the procedures at 40 CFR section 122.63, if processed as a minor modification. Minor modifications may only:
 - i. Correct typographical errors; or
 - ii. Require more frequent monitoring or reporting by a Permittee.
- 8. Any discharge of waste to any point(s) other than specifically described in this Order is prohibited, and constitutes a violation of this Order.
- 9. A copy of this Order shall be maintained by each Permittee so as to be available during normal business hours to Permittee employees responsible for implementation of the provisions of this Order and members of the public.
- 10. The discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act to any waste stream that may ultimately be released to waters of the United States, is prohibited, unless specifically authorized elsewhere in this Order or another NPDES permit. This requirement is not applicable to products used for lawn and agricultural purposes.
- 11. The discharge of any waste resulting from the combustion of toxic or hazardous wastes to any waste stream that ultimately discharges to waters of the United States is prohibited, unless specifically authorized elsewhere in this Order.
- 12. Oil or oily material, chemicals, refuse, or other pollutionable materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried off of the property and/or discharged to surface waters. Any such spill of such materials shall be contained and removed immediately.
- 13. If there is any storage of hazardous or toxic materials or hydrocarbons at a facility owned and/or operated by a Permittee and if the facility is not manned at all times, a 24-hour emergency response telephone number shall be prominently posted where it can easily be read from the outside.

14. Enforcement

- a. Violation of any of the provisions of this Order may subject the violator to any of the penalties described herein or in Attachment D of this Order, or any combination thereof, at the discretion of the prosecuting authority; except that only one kind of penalty may be applied for each kind of violation.

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- b.** Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges through the MS4 to receiving waters, may subject a Permittee to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject a Permittee to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.
- c.** The California Water Code provides that any person who violates a waste discharge requirement or a provision of the California Water Code is subject to civil penalties of up to \$5,000 per day, \$10,000 per day, or \$25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to \$10 per gallon per day or \$25 per gallon per day of violation; or some combination thereof, depending on the violation, or upon the combination of violations.
- d.** California Water Code section 13385(h)(1) requires the Regional Water Board to assess a mandatory minimum penalty of three-thousand dollars (\$3,000) for each serious violation. Pursuant to California Water Code section 13385(h)(2), a “serious violation” is defined as any waste discharge that violates the effluent limitations contained in the applicable waste discharge requirements for a Group II pollutant by 20 percent or more, or for a Group I pollutant by 40 percent or more. Appendix A of 40 CFR section 123.45 specifies the Group I and II pollutants. Pursuant to California Water Code section 13385.1(a)(1), a “serious violation” is also defined as “a failure to file a discharge monitoring report required pursuant to Section 13383 for each complete period of 30 days following the deadline for submitting the report, if the report is designed to ensure compliance with limitations contained in waste discharge requirements that contain effluent limitations.”
- e.** California Water Code section 13385(i) requires the Regional Water Board to assess a mandatory minimum penalty of three-thousand dollars (\$3,000) for each violation whenever a person violates a waste discharge requirement effluent limitation in any period of six consecutive months, except that the requirement to assess the mandatory minimum penalty shall not be applicable to the first three violations within that time period.
- f.** Pursuant to California Water Code section 13385.1(d), for the purposes of section 13385.1 and subdivisions (h), (i), and (j) of section 13385, “effluent limitation” means a numeric restriction or a numerically expressed narrative restriction, on the quantity, discharge rate, concentration, or toxicity units of a pollutant or pollutants that may be discharged from an authorized location. An effluent limitation may be final or interim, and may be expressed as a prohibition. An effluent limitation, for these purposes, does not include a receiving water limitation, a compliance schedule, or a best management practice.
- g.** Unlike subdivision (c) of California Water Code section 13385, where violations of effluent limitations may be assessed administrative civil liability on a per day

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basis, the mandatory minimum penalties provisions identified above require the Regional Water Board to assess mandatory minimum penalties for “each violation” of an effluent limitation. Some water quality-based effluent limitations in Attachments L through R of this Order (e.g., trash, as described immediately below) are expressed as annual effluent limitations. Therefore, for such limitations, there can be no more than one violation of each interim or final effluent limitation per year.

h. Trash TMDLs.

i. Consistent with the 2009 amendments to Order No. 01-182 to incorporate the Los Angeles River Trash TMDL, the water quality-based effluent limitations in Attachments L through R of this Order for trash are expressed as annual effluent limitations. Therefore, for such limitations, there can be no more than one violation of each interim or final effluent limitation per year. Trash is considered a Group I pollutant, as specified in Appendix A to 40 CFR section 123.45. Therefore, each annual violation of a trash effluent limitation in Attachments L through R of this Order by forty percent or more would be considered a “serious violation” under California Water Code section 13385(h). With respect to the final effluent limitation of zero trash, any detectable discharge of trash necessarily is a serious violation, in accordance with the State Water Board’s Enforcement Policy. Violations of the effluent limitations in Attachments L through R of this Order would not constitute “chronic” violations that would give rise to mandatory liability under California Water Code section 13385(i) because four or more violations of the effluent limitations subject to a mandatory penalty cannot occur in a period of six consecutive months.

ii.—For the purposes of enforcement under California Water Code section 13385, subdivisions (a), (b), and (c), not every storm event may result in trash discharges. In trash TMDLs adopted by the Regional Water Board, the Regional Water Board states that improperly deposited trash is mobilized during storm events of greater than 0.25 inches of precipitation. Therefore, violations of the effluent limitations are limited to the days of a storm event of greater than 0.25 inches. Once a Permittee has violated the annual effluent limitation, any subsequent discharges of trash during any day of a storm event of greater than 0.25 inches during the same storm year constitutes an additional “day in which the violation [of the effluent limitation] occurs”.

ii.

15. This Order does not exempt any Permittee from compliance with any other laws, regulations, or ordinances that may be applicable.

16. The provisions of this Order are severable. If any provisions of this Order or the application of any provision of this Order to any circumstance is held invalid, the

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application of such provision to other circumstances and the remainder of this Order shall not be affected.

16.

B. Monitoring and Reporting Program (MRP) Requirements

Dischargers shall comply with the MRP and future revisions thereto, in Attachment E of this Order or may, in coordination with an approved Watershed Management Program per Part VI.C, implement a customized monitoring program that achieves the five Primary Objectives set forth in Part II.A. of Attachment E and includes the elements set forth in Part II.E. of Attachment E.

C. Watershed Management Programs

1. General

- a. The purpose of this Part VI.C is to allow Permittees the flexibility to develop Watershed Management Programs to implement the requirements of this Order on a watershed scale through customized strategies, control measures, and BMPs.
- b. Participation in a Watershed Management Program is voluntary and allows a Permittee to address the highest watershed priorities, including complying with the requirements of Part V.A. (Receiving Water Limitations), Part VI.E (Total Maximum Daily Load Provisions) and Attachments L through R, to by customize customizing the requirements control measures in Parts III.A.4 (Prohibitions – Non-Storm Water Discharges) and VI.D (Minimum Control Measures) to address the highest watershed priorities, including achieving compliance with the requirements of Part VI.E (Total Maximum Daily Load Provisions) and Attachments L through R.
- c. Customized strategies, control measures, and BMPs shall be implemented on a watershed basis, where applicable, through each Permittee's storm water management program and/or collectively by all participating Permittees through a Watershed Management Program.
- d. ~~The goal of the Watershed Management Programs is to~~ shall ensure that discharges from the Los Angeles County Permittees' MS4s: (i) achieve applicable water quality-based effluent limitations in Part VI.E and Attachments L through R pursuant to the corresponding compliance schedules, (ii) do not cause or contribute to exceedances of receiving water limitations in Parts V.A and VI.E and Attachments L through R, and (iii) do not include non-storm water discharges that are effectively prohibited pursuant to Part III.A. cause exceedances of non-storm water action levels in Attachment G. The programs shall also ensure that controls are implemented to reduce the discharge of pollutants to the maximum extent practicable (MEP) pursuant to Part IV.A.1.

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- e. Watershed Management Programs shall be developed either collaboratively or individually using the Regional Water Board's Watershed Management Areas (WMAs). Where appropriate, WMAs may be separated into subwatersheds to focus water quality prioritization and implementation efforts by receiving water.
- f. Each Watershed Management Program shall be consistent with Part VI.C.5-C.8 and shall:
- i. Prioritize water quality issues resulting from storm water and non-storm water discharges from the MS4 to receiving waters within each WMA,
 - ii. Identify and implement strategies, control measures, and BMPs to achieve the outcomes specified in Part VI.C.1.d~~applicable water quality-based effluent limitations, receiving water limitations, and/or non-storm water action levels consistent with corresponding compliance schedules in this Order,~~
 - iii. Execute an integrated monitoring program and assessment program pursuant to ~~the~~ Attachment E – MRP, Part IV to determine progress towards achieving applicable limitations and/or action levels in Attachment G, and
 - iv. Revise/Modify strategies, control measures, and BMPs as necessary based on analysis of monitoring data collected pursuant to the MRP to ensure that to maintain progress towards achieving applicable water quality-based effluent limitations and receiving water limitations and other milestones set forth in the Watershed Management Program will be achieved~~/or action levels in Attachment G.~~
- g. Permittees may elect to develop an enhanced Watershed Management Program. An enhanced Watershed Management Program is one that comprehensively evaluates opportunities, within the participating Permittees' collective jurisdictional area in a Watershed Management Area, for collaboration among Permittees and other partners on multi-benefit regional projects to control MS4 discharges of storm water by, wherever feasible, retaining the 85th percentile, 24-hour storm event for the drainage areas tributary to the projects, while also achieving other benefits including flood control and water supply, among others. Where retention of the 85th percentile, 24-hour storm event is not feasible, the enhanced Watershed Management Program shall include a Reasonable Assurance Analysis to demonstrate that applicable water quality based effluent limitations and receiving water limitations shall be achieved through implementation of other watershed control measures. An enhanced Watershed Management Program shall:
- i. Be consistent with the provisions in Part VI.C.1.a-f and VI.C.5-C.8;
 - ii. Incorporate applicable State agency input on priority setting and other key implementation issues;

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- iii. Provide for meeting water quality standards and other CWA obligations by utilizing provisions in the CWA and its implementing regulations, policies and guidance;
- iv. Maximize retention through infiltration or capture and reuse of the storm water volume from the 85th percentile, 24-hour storm within the area covered by the enhanced Watershed Management Program;
- v. Maximize the effectiveness of funds through analysis of alternatives and the selection and sequencing of actions needed to address human health and water quality related challenges and non-compliance;
- vi. Incorporate effective innovative technologies, approaches and practices, including green infrastructure;
- vii. Ensure that existing requirements to comply with technology-based effluent limitations and core requirements (e.g., including elimination of non-storm water discharges of pollutants through the MS4, and controls to reduce the discharge of pollutants in storm water to the maximum extent practicable) are not delayed;
- viii. Ensure that a financial strategy is in place; and
- iv-ix. Provide appropriate opportunity for meaningful stakeholder input throughout the development of the enhanced Watershed Management Program, including the formation of a Technical Advisory Committee (TAC) that will advise and participate in the development of the enhanced Watershed Management Programs from month 6 through the date of program approval. The composition of the TAC may include at least one Permittee representative from each Watershed Management Area for which an enhanced Watershed Management Program will be developed and a minimum of one public representative from a non-governmental organization with public membership.

2. Compliance with Receiving Water Limitations Not Otherwise Addressed by a TMDL

- a. For receiving water limitations in Part V.A. associated with water body-pollutant combinations not addressed through a TMDL, but which a Permittee elects to address through a Watershed Management Program or enhanced Watershed Management Program as set forth in this Part VI.C., a Permittee shall comply as follows:

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i. For pollutants that are in the same class²⁴ as those addressed in a TMDL for the watershed and for which the water body is identified as impaired on the State's Clean Water Act Section 303(d) List as of the effective date of this Order:

- (1) Permittees shall demonstrate that the Watershed Control Measures to achieve the applicable TMDL provisions identified pursuant to Part VI.C.5.b.iv.(3) will also adequately address contributions of the pollutant(s) within the same class from MS4 discharges to receiving waters, consistent with the assumptions and requirements of the corresponding TMDL provisions, including interim and final requirements and deadlines for their achievement, such that the MS4 discharges of the pollutant(s) will not cause or contribute to exceedances of receiving water limitations in Part V.A.
- (2) Permittees shall include the water body-pollutant combination(s) in the Reasonable Assurance Analysis in Part VI.C.5.b.iv.(5).
- (3) Permittees shall identify milestones and dates for their achievement consistent with those in the corresponding TMDL.

ii. For pollutants that are not in the same class as those addressed in a TMDL for the watershed, but for which the water body is identified as impaired on the State's Clean Water Act Section 303(d) List as of the effective date of this Order:

- (1) Permittees shall assess contributions of the pollutant(s) from MS4 discharges to the receiving waters and sources of the pollutant(s) within the drainage area of the MS4 pursuant to Part VI.C.5.a.iii.
- (2) Permittees shall identify Watershed Control Measures pursuant to Part VI.C.5.b. that will adequately address contributions of the pollutant(s) from MS4 discharges to receiving waters such that the MS4 discharges of the pollutant(s) will not cause or contribute to exceedances of receiving water limitations in Part V.A.
- (3) Permittees shall include the water body-pollutant in the Reasonable Assurance Analysis in Part VI.C.5.b.iv.(5).
- (4) Permittees shall identify enforceable requirements and milestones and dates for their achievement within a timeframe that is as short as possible, taking into account the technological, operation, and economic factors that affect the design, development, and implementation of the control measures that are necessary. The time between dates shall not exceed one year. Milestones shall relate to a specific water quality endpoint (e.g., x% of the MS4 drainage area is meeting the receiving water limitations) and dates shall relate either to taking a specific action or meeting a milestone.

²⁴ Pollutants are considered in a similar class if they have similar fate and transport mechanisms, can be addressed via the same types of control measures, and within the same timeline already contemplated as part of the Watershed Management Program for the TMDL.

iii. For pollutants for which there are exceedances of receiving water limitations in Part V.A., but for which the water body is not identified as impaired on the State's Clean Water Act Section 303(d) List as of the effective date of this Order:

- (1) Upon an exceedance of a receiving water limitation, based on data collected pursuant to the MRP and approved IMPs and CIMPs, Permittees shall assess contributions of the pollutant(s) from MS4 discharges to the receiving waters and sources of the pollutant(s) within the drainage area of the MS4 pursuant to Part VI.C.5.a.iii.
- (2) If MS4 discharges are identified as a source of the pollutant(s) that has caused or contributed to, or has the potential to cause or contribute to, the exceedance(s) of receiving water limitations in Part V.A., Permittees shall address contributions of the pollutant(s) from MS4 discharges through modifications to the WMP or Integrated Program pursuant to Part VI.C.8.a.ii.
- (a) In a modified WMP, Permittees shall identify Watershed Control Measures pursuant to Part VI.C.5.b. that will adequately address contributions of the pollutant(s) from MS4 discharges to receiving waters such that the MS4 discharges of the pollutant(s) will not cause or contribute to exceedances of receiving water limitations in Part V.A.
- (b) Permittees shall modify the Reasonable Assurance Analysis pursuant to Part VI.C.5.b.iv.(5) to address the pollutant(s).
- (c) Permittees shall identify enforceable requirements and milestones and dates for their achievement to address the pollutant(s) within a timeframe that is as short as possible, taking into account the technological, operation, and economic factors that affect the design, development, and implementation of the control measures that are necessary. The time between dates shall not exceed one year. Milestones shall relate to a specific water quality endpoint (e.g., x% of the MS4 drainage area is meeting the receiving water limitations) and dates shall relate either to taking a specific action or meeting a milestone.
- b. A Permittee's full compliance with all requirements and dates for their achievement in an approved Watershed Management Program or enhanced Watershed Management Program shall constitute compliance with receiving water limitations in Part V.A. of this Order for the specific water body-pollutant combinations addressed by an approved Watershed Management Program or enhanced Watershed Management Program.**
- c. If a Permittee fails to meet any requirement or date for its achievement in an approved Watershed Management Program or enhanced Watershed Management Program, the Permittee shall be subject to the provisions of Part V.A. for the waterbody-pollutant combination(s) that were to be addressed by the requirement.**

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3. Receiving Water Limitations Addressed by a TMDL

a. A Permittee’s full compliance with all requirements and dates for their achievement in an approved Watershed Management Program or enhanced Watershed Management Program shall constitute compliance with applicable interim water quality based effluent limitations and interim receiving water limitations pursuant to Part VI.E. and Attachments L-R for the pollutant(s) addressed by the approved Watershed Management Program.

2.4. Process

a. Timelines for Implementation

i. Each Permittee shall ensure implementation of the following requirements per the schedule specified in Table 9 below:

Table 9. Watershed Management Program Implementation Requirements

Part	Provision	Due Date
VI.C.24.b	IV. <u>Notify Regional Water Board of intent to develop Watershed Management Program or enhanced WMP and request submittal date for draft program plan</u>	6 months after Order effective date
V. VI.C.24.bc	VI. <u>For Permittee(s) that elect not to implement the conditions of Part VI.C.4.c.i or c.ii, Submit submit draft plan to Regional Water Board Executive Officer</u>	1 year after Order effective date
VI.C.4.c	<u>For Permittee(s) that elect to implement the conditions of Part VI.C.4.c.i or c.ii, submit draft plan to Regional Water Board Executive Officer</u>	<u>18 months after Order effective date</u>
VI.C.4.c.iv	<u>For Permittees that elect to collaborate on an enhanced WMP that meets the requirements of Part VI.C.4.c.iv, submit draft plan to Regional Water Board Executive Officer</u>	<u>18 months after Order effective date, provide final work plan for development of enhanced WMP, including early actions to achieve all interim and final water quality based effluent limitations and receiving water limitations pursuant to Part</u>

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			<u>VI.E. and applicable Attachments with deadlines occurring prior to program approval</u> <u>30 months after Order effective date, submit draft plan</u>
VII. .c	<u>VI.C.24</u>	Submit final plan to Regional Water Board Executive Officer	3 months after receipt of Regional Water Board comments on draft plan
VIII.	<u>VI.C.64</u>	Begin implementation of Watershed Management Program	Upon submittal <u>approval of final plan by Regional Water Board Executive Officer</u>
IX.	<u>VI.C.68-a.ii</u>	X. <u>Comprehensive Evaluation evaluation of Watershed Management Program and submittal of revisions modifications to plan</u>	Annually, beginning in 2015 <u>Every two years from date of approval</u>

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b. Permittees that elect to develop a Watershed Management Program must notify the Regional Water Board no later than six months after the effective date of this Order.

i. Such notification shall specify if the Permittee(s) are requesting a 12-month or 18-month submittal date for the draft Watershed Management Program, per Part VI.C.4.c.i – ii, or if the Permittees are requesting a 18/30-month submittal date for the draft enhanced Watershed Management Program per Part VI.C.4.c.iv.

ii. As part of their notice of intent to develop a WMP, Permittees shall identify all applicable water quality based effluent limitations and receiving water limitations pursuant to Part VI.E. and the applicable attachment(s) with compliance deadlines occurring prior to approval of a WMP. Permittees shall identify watershed control measures that will be implemented by participating Permittees concurrently with the development of a Watershed Management Program to ensure that MS4 discharges achieve applicable water quality based effluent limitations and receiving water limitations set forth in Part VI.E. and the applicable attachment(s) with compliance deadlines occurring prior to approval of a WMP.

iii. As part of their notification, Permittees electing to develop an enhanced Watershed Management Program shall submit the following:

(1) Plan concept and geographical scope,

- (2) Cost estimate for plan development,
- (3) Executed MOU/agreement among participating Permittees to fund plan development,
- (4) Interim milestones for plan development and deadlines for their achievement,
- (5) Identification of, and commitment to fully implement, one multi-benefit regional pilot project within each watershed covered by the plan within 30 months of the effective date of this Order.
- (6) Demonstration that the requirements in Parts VI.C.4.c.iv.(1) and (2) have been met.

b.—

c. Permittees that elect to develop a Watershed Management Program shall submit a draft plan to the Regional Water Board Executive Officer ~~no later than 1 year after the effective date of this Order~~ as follows:

i. For Permittees that elect to collaborate on the development of a Watershed Management Program, Permittees shall submit the draft Watershed Management Program no later than 18 months after the effective date of this Order if the following conditions are met in greater than 50% of the land area in the watershed:

- (1) Commence development of a Low Impact Development (LID) ordinance meeting the requirements of this Order's Planning and Land Development Program within 60 days of the effective date of the Order and have the first reading before the Permittee's decision-making body within 6 months of the effective date of the Order.
- (2) Commence development of a policy that specifies the use of green street strategies for transportation corridors within 60 days of the effective date of the Order and have the first reading before the Permittee's decision-making body within 6 months of the effective date of the Order.
- (3) Demonstrate in the notification of the intent to develop a Watershed Management Program that Parts VI.C.4.c.i(1) and (2) have been met in greater than 50% of the watershed area.

ii. For Permittees that elect to develop an individual Watershed Management Program, Permittees shall submit the draft Watershed Management Program no later than 18 months after the effective date of this Order if the following conditions are met:

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- (1) Commence development of a Low Impact Development (LID) ordinance meeting the requirements of this Order's Planning and Land Development Program within 60 days of the effective date of the Order and have the first reading before the Permittee's decision-making body within 6 months of the effective date of the Order.
- (2) Commence development of a policy that specifies the use of green street strategies for transportation corridors within 60 days of the effective date of the Order and have the first reading before the Permittee's decision-making body within 6 months of the effective date of the Order.
- (3) Demonstrate in the notification of the intent to develop a Watershed Management Program that Parts VI.C.4.c.ii.(1) and (2) have been met.
- iii. For Permittees that elect not to implement the conditions under Part VI.C.4.c.i. or Part VI.C.4.c.ii., Permittees shall submit the draft Watershed Management Program no later than 12 months after the effective date of this Order.
- iv. For Permittees that elect to collaborate on the development of an enhanced Watershed Management Program, Permittees shall submit the work plan for development of the enhanced Watershed Management Program no later than 18 months after the effective date of this Order, and shall submit the draft program no later than 30 months after the effective date of this Order if the following conditions are met in greater than 50% of the land area in the watershed:
- (1) Commence development of a Low Impact Development (LID) ordinance meeting the requirements of this Order's Planning and Land Development Program within 60 days of the effective date of the Order and have the first reading before the Permittee's decision-making body within 6 months of the effective date of the Order.
- (2) Commence development of a policy that specifies the use of green street strategies for transportation corridors within 60 days of the effective date of the Order and have the first reading before the Permittee's decision-making body within 6 months of the effective date of the Order.
- e.(3) Demonstrate in the notification of the intent to develop an enhanced Watershed Management Program that Parts VI.C.4.c.iv.(1) and (2) have been met in greater than 50% of the watershed area.

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d. Until the Watershed Management Program is approved by the Regional Water Board Executive Officer, Permittees that elect to develop a Watershed Management Program or enhanced Watershed Management Program shall:

i. Continue to implement their existing storm water management programs, including actions within each of the six categories of minimum control measures consistent with 40 CFR section 122.26(d)(2)(iv), and

ii. Implement watershed control measures sufficient to achieve water quality-based effluent limitations and receiving water limitations pursuant to Part VI.E. and set forth in Attachments L through R in satisfaction of compliance deadlines occurring prior to program approval.

a. Permittees that do not elect to develop a Watershed Management Program shall be subject to the baseline requirements in Part VI.D and shall demonstrate compliance with receiving water limitations pursuant to Part V.A. and with applicable interim water quality-based effluent limitations in Part VI.E pursuant to subparts VI.E.2.d.i.(1)-(3).

e.

f. Permittees subject to the Middle Santa Ana River Watershed Bacteria Indicator TMDL shall submit a Comprehensive Bacteria Reduction Plan (CBRP) for dry weather to the Regional Water Board Executive Officer no later than six months after the effective date of this Order. The CBRP shall describe, in detail, the specific actions that have been taken or will be taken to achieve compliance with the dry weather water quality-based effluent limitations and the receiving water limitations for the Middle Santa Ana River Watershed Bacteria Indicator TMDL by December 31, 2015. The CBRP shall also establish a schedule for developing a CBRP to comply with the water quality-based effluent limitations and the receiving water limitations for the Middle Santa Ana River Bacteria Indicator TMDL during wet weather by December 31, 2025. The CBRP may be developed in lieu of the Watershed Management Program for the Middle Santa Ana River Watershed.

b.

2.4. Program Development

a. Identification of Water Quality Priorities

Permittees shall identify the water quality priorities within each WMA that will be addressed by the Watershed Management Program. At a minimum, these priorities shall include achieving applicable water quality-based effluent limitations and/or receiving water limitations established pursuant to TMDLs, as set forth in Part VI.E and Attachments L through R of this Order.

i. Water Quality Characterization. Each plan shall include an evaluation of existing water quality conditions, including characterization of storm water

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and non-storm water discharges from the MS4 and receiving water quality, to support identification and prioritization/sequencing of management actions.

ii. ~~Water body~~Body-Pollutant Classification. On the basis of the evaluation of existing water quality conditions, water body-pollutant combinations shall be classified into one of the following three categories:

- (1) Category 1 (Highest Priority): Water body-pollutant combinations for which water quality-based effluent limitations and/or receiving water limitations are established in Part VI.E and Attachments L through R of this Order.
- (2) Category 2 (High Priority): Pollutants for which data indicate water quality impairment in the receiving water according to the State's Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List (State Listing Policy) and for which MS4 discharges may be causing or contributing to the impairment.
- (3) Category 3 (Medium Priority): Pollutants for which there are insufficient data to indicate water quality impairment in the receiving water according to the State's Listing Policy, but which exceed applicable water quality standards, receiving water limitations contained in this Order and for which MS4 discharges may be causing or contributing to the exceedance.

iii. Source Assessment. Utilizing existing information, potential sources within the watershed for the water body-pollutant combinations in Categories 1 ~~and 2-3~~ shall be identified.

- (1) Permittees shall identify known and suspected storm water and non-storm water pollutant sources in discharges to the MS4 and from the MS4 to receiving waters and any other stressors related to MS4 discharges causing or contributing to the ~~highest~~ water quality priorities ~~(Categories 1 and 2)~~. The identification of known and suspected sources of the highest water quality priorities shall consider the following:
 - (a) Review of available data, including but not limited to:
 - (i) Findings from the Permittees' Illicit Connections and Illicit Discharge Elimination Programs;
 - (ii) Findings from the Permittees' Industrial/Commercial Facilities Programs;
 - (iii) Findings from the Permittees' Development Construction Programs;

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- (iv) Findings from the Permittees' Public Agency Activities Programs;
 - (v) TMDL source investigations;
 - (vi) Watershed model results;
 - (vii) Findings from the Permittees' monitoring programs, including but not limited to TMDL compliance monitoring and receiving water monitoring; and
 - (viii) Any other pertinent data, information, or studies related to pollutant sources and conditions that contribute to the highest water quality priorities.
- (b) Locations of the Permittees' MS4s, including, at a minimum, all MS4 major outfalls and major structural controls for storm water and non-storm water that discharge to receiving waters.
 - (c) Other known and suspected sources of pollutants in non-storm water or storm water discharges from the MS4 to receiving waters within the WMA.
- iv. Prioritization.** Based on the findings of the source assessment, the issues within each watershed shall be prioritized and sequenced. Watershed priorities shall include at a minimum:
- (1) TMDLs
 - (a) Controlling pollutants for which there are water quality-based effluent limitations and/or receiving water limitations with interim or final compliance deadlines within the permit term, or TMDL compliance deadlines that have already passed and limitations have not been achieved.
 - (b) Controlling pollutants for which there are water quality-based effluent limitations and/or receiving water limitations with interim or final compliance deadlines between September 6, 2012 and October 25, 2017.
 - (2) Other Receiving Water Considerations
 - (a) Controlling pollutants for which data indicate impairment or exceedances of receiving water limitations in the receiving water and the findings from the source assessment implicates discharges from the MS4 shall be considered the second highest priority.

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b. Selection of Watershed Control Measures

i. Permittees shall identify strategies, control measures, and BMPs to implement through their individual storm water management programs, and collectively on a watershed scale, with the goal of creating an efficient program to focus individual and collective resources on watershed priorities.

ii. The objectives of the Watershed Control Measures shall include:

- (1) Prevent or eliminate non-storm water discharges to the MS4 that are a source of pollutants from the MS4 to receiving waters.
- (2) Implement pollutant controls necessary to achieve all applicable interim and final water quality-based effluent limitations and/or receiving water limitations pursuant to corresponding compliance schedules.
- (3) Ensure that discharges from the MS4 do not cause or contribute to exceedances of receiving water limitations.

iii. Watershed Control Measures may include:

- (1) Structural and/or non-structural controls and operation and maintenance procedures that are designed to achieve applicable water quality-based effluent limitations, receiving water limitations in Part VI.E and/or Attachments L through R;
- (2) Retrofitting areas of existing development known or suspected to contribute to the highest water quality priorities with regional or sub-regional controls or management measures; and
- (3) Stream and/or habitat rehabilitation or restoration projects where stream and/or habitat rehabilitation or restoration are necessary for, or will contribute to demonstrable improvements in the physical, chemical, and biological receiving water conditions and restoration and/or protection of water quality standards in receiving waters.

iv. The following provisions of this Order shall be incorporated as part of the Watershed Management Program:

- (1) Minimum Control Measures.
 - (a) Permittees shall assess the minimum control measures (MCMs) as defined in Part VI.D.4 to Part VI.D.9-10 of this Order to identify opportunities for focusing resources on the high priority issues in each watershed. For each of the following minimum control measures, Permittees shall identify potential modifications that will address watershed priorities:

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- (i) ~~Planning and Land Development Program~~
- (ii) ~~(i) Development Construction Program~~
- (iii) ~~(ii) Industrial/Commercial Facilities Program~~
- (iv) ~~(iii) Illicit Connection and Illicit Discharges Detection and Elimination Program~~
- (v) ~~(iv) Public Agency Activities Program~~
- (vi) ~~(v) Public Information and Participation Program~~
- (b) At a minimum, the Watershed Management Program shall include management programs consistent with 40 CFR section 122.26(d)(2)(iv)(A)-(D).
- (c) If the Permittee(s) elects to eliminate a control measure identified in Parts VI.D.4, VI.D.5, VI.D.6 and VI.D.8 to Part VI.D.9-10, the Permittee(s) shall provide a justification for its elimination. The Planning and Land Development Program is not eligible for elimination.
- (d) Such customized actions, once approved as part of the Watershed Management Program, shall replace in part or in whole the requirements in Parts VI.D.4, VI.D.5, VI.D.6 and VI.D.8 to Part VI.D.9-10 for participating Permittees.
- (2) Non-Storm Water Discharge Measures. Where Permittees identify non-storm water discharges from the MS4 as a source of pollutants in the source assessment that cause or contribute to exceedance of receiving water limitations, the Watershed Control Measures shall include strategies, control measures, and/or BMPs that must be implemented to effectively eliminate the source of pollutants consistent with Parts III.A and VI.D.9-10. These may include measures to prohibit the non-storm water discharge to the MS4, additional BMPs to reduce pollutants in the non-storm water discharge or conveyed by the non-storm water discharge, diversion to a sanitary sewer for treatment, or strategies to require the non-storm water discharge to be separately regulated under a general NPDES permit.
- (3) TMDL Control Measures. Permittees shall compile control measures that have been identified in TMDLs and corresponding implementation plans. Permittees shall identify those control measures to be modified, if any, to most effectively address TMDL requirements within the watershed. If not sufficiently identified in previous documents, or if implementation plans have not yet been developed (e.g., USEPA established TMDLs), the Permittees shall evaluate and identify control

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measures to achieve water quality-based effluent limitations and/or receiving water limitations established in this Order pursuant to these TMDLs.

- (a) TMDL control measures shall include where necessary control measures to address both storm water and non-storm water discharges from the MS4.
 - (b) TMDL control measures may include baseline or customized activities covered under the general MCM categories in Part VI.D as well as BMPs and other control measures covered under the non-storm water discharge provisions of Part III.A of this Order.
 - (c) The ~~plan~~-WMP shall include, at a minimum, those actions that will be implemented during the permit term to achieve interim and/or final water quality-based effluent limitations and/or receiving water limitations with compliance deadlines within the permit term.
- (4) Each plan shall include the following components:
- (a) Identification of specific structural controls and non-structural best management practices, including operational source control and pollution prevention, and any other actions or programs to achieve all water quality-based effluent limitations and receiving water limitations contained in this Part VI.E and Attachments L through R to which the Permittee(s) is subject;
 - (b) For each structural control and non-structural best management practice, the number, type, and location(s) and/or frequency of implementation;
 - (c) For any pollution prevention measures, the nature, scope, and timing of implementation;
 - (d) For each structural control and non-structural best management practice, interim milestones and dates for achievement to ensure that TMDL compliance deadlines will be met; and
 - (e) The plan shall clearly identify the responsibilities of each participating Permittee for implementation of watershed control measures.
- (5) Permittees shall conduct a Reasonable Assurance Analysis for each TMDL-water body-pollutant combination addressed by the Watershed Management Program. A Reasonable Assurance Analysis (RAA) shall be quantitative and performed using a peer-reviewed model in the public domain. Models to be considered for the RAA, without exclusion, are the Watershed Management Modeling System (WMMS), Hydrologic Simulation Program-FORTRAN (HSPF), and the Structural BMP Prioritization and Analysis Tool (SBPAT). The RAA shall commence with assembly of all available, relevant subwatershed

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data collected within the last 10 years, including land use and pollutant loading data, establishment of quality assurance/quality control (QA/QC) criteria, QA/QC checks of the data, and identification of the data set meeting the criteria for use in the analysis. Data on performance of watershed control measures needed as model input shall be drawn only from peer-reviewed sources. These data shall be statistically analyzed to determine the best estimate of performance and the confidence limits on that estimate for the pollutants to be evaluated. The objective of the RAA shall be to demonstrate the ability of Watershed Management Programs and enhanced Watershed Management Programs to ensure that Permittees' MS4 discharges achieve applicable water quality based effluent limitations and do not cause or contribute to exceedances of receiving water limitations. as follows:

- (a) ~~Permittees shall conduct an assessment (through a quantitative analysis / modeling effort) to demonstrate~~ using the RAA that the activities and control measures identified in the Watershed Control Measures will achieve applicable water quality-based effluent limitations and/or receiving water limitations in Attachments L through R with compliance deadlines during the permit term.
- (b) Where the TMDL Provisions in Part VI.E and Attachments L through R do not include interim or final water quality-based effluent limitations and/or receiving water limitations with compliance deadlines during the permit term, Permittees shall identify interim milestones and dates for their achievement to ensure adequate progress toward achieving interim and final water quality-based effluent limitations and/or receiving water limitations with deadlines beyond the permit term.
- ~~(b)~~(c) For water body-pollutant combinations not addressed by TMDLs, Permittees shall demonstrate using the RAA that the activities and control measures identified in the Watershed Control Measures will achieve applicable receiving water limitations as soon as possible.
- (6) Permittees shall provide documentation that they have the necessary legal authority to implement the Watershed Control Measures identified in the plan, or that other legal authority exists to compel implementation of the Watershed Control Measures.

c. Compliance Schedules

Permittees shall incorporate compliance schedules in Attachments L through R into the plan and, where necessary develop interim milestones and dates for

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their achievement. Compliance schedules and interim milestones and dates for their achievement shall be used to measure progress towards addressing the highest water quality priorities and achieving applicable water quality-based effluent limitations and/or receiving water limitations.

- i. Schedules must be adequate for measuring progress on a watershed scale ~~twice during the permit term~~ once every two years.
- ii. Schedules must be developed for both the strategies, control measures and BMPs implemented by each Permittee within its jurisdiction and for those that will be implemented by multiple Permittees on a watershed scale.
- iii. Schedules shall incorporate the following:
 - (1) Compliance deadlines occurring within the permit term for all applicable interim and/or final water quality-based effluent limitations and/or receiving water limitations in Part VI.E and Attachments L through R of this Order,
 - (2) Interim milestones and dates for their achievement within the permit term for any applicable final water quality-based effluent limitation and/or receiving water limitation in Part VI.E and Attachments L through R, where deadlines within the permit term are not otherwise specified.
 - (3) For watershed priorities related to addressing exceedances of receiving water limitations in Part V.A and not otherwise addressed by Part VI.E:
 - (a) Milestones based on measureable criteria or indicators, to be achieved in the receiving waters and/or MS4 discharges,
 - ~~(b)~~(a) A schedule with dates for achieving the milestones ~~as soon as possible~~, and
 - ~~(c)~~(b) A final date for achieving the receiving water limitations ~~within the permit term~~ as soon as possible.
 - ~~(d)~~(c) The milestones and implementation schedule in (a)-(c) fulfill the requirements in Part V.A.3.a to prepare an Integrated Monitoring Compliance Report.

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3.5. Watershed Management Program Implementation

Each Permittee shall begin implementing the Watershed Management Program immediately upon approval of the plan by the Regional Water Board Executive Officer.

- a. Permittees may request an extension of deadlines for achievement of interim milestones established pursuant to Part VI.C.4.c.iii.(3). Permittees shall provide requests in writing at least 90 days prior to the deadline and shall include in the request the justification for the extension. Extensions shall be subject to approval by the Regional Water Board Executive Officer.

4.6. Integrated Watershed Monitoring and Assessment

Permittees in each WMA shall develop an integrated monitoring program ~~and assessment program~~ as set forth in Part IV of the MRP (Attachment E) or implement a customized monitoring program in conjunction with an approved Watershed Management Program as defined below. Each monitoring program shall ~~to~~ assess progress toward achieving the water quality-based effluent limitations and/or receiving water limitations per the compliance schedules, and progress toward addressing the ~~highest~~ water quality priorities for each WMA. The customized monitoring program shall be submitted as part of the Watershed Management Program, or where Permittees elect to develop an enhanced Watershed Management Program, shall be submitted within 18 months of the effective date of this Order. Monitoring programs shall be subject to approval by the Executive Officer. The customized monitoring program shall be designed to address the Primary Objectives detailed in Attachment E, Part II.A and shall include the following program elements:

- Receiving Water Monitoring
- Storm Water Outfall Monitoring
- Non-Storm Water Outfall Monitoring
- New Development/Re-Development Effectiveness Tracking
- Regional Studies

5.7. Adaptive Management Process

- a. Watershed Management Program Adaptive Management Process
- i. Permittees in each WMA shall implement an adaptive management process, ~~annually every two years from the date of program approval during the permit term, beginning in 2015,~~ adapting the Watershed Management Program or enhanced WMP to become more effective, based on, but not limited to a consideration of the following:
- (1) Progress toward achieving interim and/or final water quality-based effluent limitations and/or receiving water limitations in Part VI.E and Attachments L through R, according to established compliance schedules;

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- (2) Progress toward achieving improved water quality in MS4 discharges and achieving receiving waters limitations through implementation of the watershed control measures based on an evaluation of outfall-based monitoring data and receiving water monitoring data;
 - (3) Achievement of interim milestones;
 - (4) Re-evaluation of the ~~highest~~ water quality priorities identified for the WMA based on more recent water quality data for discharges from the MS4 and the receiving water(s) and a reassessment of sources of pollutants in MS4 discharges;
 - (5) Availability of new information and data from sources other than the Permittees' monitoring program(s) within the WMA that informs the effectiveness of the actions implemented by the Permittees;
 - (6) Regional Water Board recommendations; and
 - (7) Recommendations for modifications to the Watershed Management Program solicited through a public participation process.
- ii. Based on the results of the adaptive management process, Permittees shall report any modifications, including where appropriate new compliance deadlines and interim milestones, necessary to improve the effectiveness of the Watershed Management Program or enhanced Watershed Management Program in the Annual Report, as required pursuant to Part XVIII.A.6 of the MRP (Attachment E), and as part of the Report of Waste Discharge (ROWD) required pursuant to Part II.B of Attachment D – Standard Provisions.
- (1) The adaptive management process fulfills the requirements in Part V.A.4 to address continuing exceedances of receiving water limitations.
- ~~iii.~~ Permittees shall implement any modifications to the Watershed Management Program or enhanced Watershed Management Program upon approval by the Regional Water Board Executive Officer or within 60 days of submittal if the Regional Water Board Executive Officer expresses no objections.
- ~~d.~~ Jurisdictional Storm Water Management Program Adaptive Management Process
- ~~iv.~~ Permittees in the WMA shall implement the adaptive management process at least annually with regard to its jurisdictional storm water management program to improve its effectiveness, based on, but not limited to the following:
- (1) ~~Measurable or demonstrable reductions of illicit discharges to the MS4 based on an evaluation of outfall-based monitoring data;~~

- ~~(2) Measurable or demonstrable reductions of pollutants in storm water discharges from the Permittee's MS4 through implementation of the storm water management program based on an evaluation of outfall-based monitoring data;~~
- ~~(3) Efficiency in implementing the Watershed Management Program;~~
- ~~(4) Progress toward achieving interim and/or final water quality-based effluent limitations and/or receiving water limitations in Part VI.E and Attachments L through R, according to established compliance schedules;~~
- ~~(5) Progress toward achieving receiving waters limitations through implementation of the storm water management program based on an evaluation of outfall-based monitoring data and receiving water monitoring data; and~~
- ~~(6) Regional Water Board recommendations during program and/or site inspections.~~
- ~~v. Based on the results of the adaptive management process, the Permittee shall report any modifications, including where appropriate new compliance deadlines or interim milestones, necessary to improve the effectiveness its jurisdictional storm water management program in the Annual Report, as required pursuant to Part XVIII.A.6 of the MRP (Attachment E), and as part of the ROWD required pursuant to Part II.B (Attachment D – Standard Provisions).~~
- ~~(1) The adaptive management process fulfills the requirements in Part V.A.4 to address continuing exceedances of receiving water limitations.~~
- ~~iii. The Permittee shall implement any modifications to its jurisdictional storm water management program upon acceptance by the Regional Water Board Executive Officer or within 60 days of submittal if the Regional Water Board Executive Officer expresses no objections.~~

~~ii.~~

C.D. Storm Water Management Program Minimum Control Measures

1. General Requirements

- a.** Each Permittee shall implement the requirements in Parts VI.D.4 through VI.D.9 10 below, or may in lieu of the requirements in Parts VI.D.4 through VI.D.9-10 implement customized actions within each of these general categories of control measures as set forth in an approved Watershed Management Program per Part VI.C. Implementation shall be consistent with the requirements of 40 CFR § 122.26(d)(2)(iv).

b. Timelines for Implementation

- i. Unless otherwise noted in Part VI.D, each Permittee that does not elect to develop a Watershed Management Program or enhanced Watershed Management Program per Part VI.C shall ensure implementation of implement the requirements contained in Part VI.D within 30 days 6 months after the effective date of this Order. In the interim, a Permittee shall continue to implement its existing storm water management program, including actions within each of the six categories of minimum control measures consistent with 40 CFR section 122.26(d)(2)(iv).
- i.ii. Permittees that elect to develop a Watershed Management Program or enhanced Watershed Management Program shall continue to implement their existing storm water management programs, including actions within each of the six categories of minimum control measures consistent with 40 CFR section 122.26(d)(2)(iv) until the Watershed Management Program or enhanced Watershed Management Program is approved by the Regional Water Board Executive Officer.

2. Progressive Enforcement and Interagency Coordination

- a.** Each Permittee shall develop and implement a Progressive Enforcement Policy to ensure that (1) regulated Industrial/Commercial facilities, (2) construction sites, (3) development and redevelopment sites with post-construction controls, and (4) illicit discharges are each brought into compliance with all storm water and non-storm water requirements within a reasonable time period as specified below.
- i.** Follow-up Inspections
- In the event that a Permittee determines, based on an inspection or illicit discharge investigation conducted, that a facility or site operator has failed to adequately implement all necessary BMPs, that Permittee shall take progressive enforcement actions which, at a minimum, shall include a follow-up inspection within 4 weeks from the date of the initial inspection and/or investigation.
- ii.** Enforcement Action
- In the event that a Permittee determines that a facility or site operator has failed to adequately implement BMPs after a follow-up inspection, that Permittee shall take enforcement action as established through authority in its municipal code and ordinances, through the judicial system, or refer the case to the Regional Water Board, per the Interagency Coordination provisions below.
- iii.** Records Retention
- Each Permittee shall maintain records, per their existing record retention policies, and make them available on request to the Regional Water Board, including inspection reports, warning letters, notices of violations, and other

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enforcement records, demonstrating a good faith effort to bring facilities into compliance.

iv. Referral of Violations of Municipal Ordinances and California Water Code § 13260

A Permittee may refer a violation(s) of its municipal storm water ordinances and/or California Water Code section 13260 by Industrial and Commercial facilities and construction site operators to the Regional Water Board provided that the Permittee has made a good faith effort of applying its Progressive Enforcement Policy to achieve compliance with its own ordinances. At a minimum, a Permittee’s good faith effort must be documented with:

- (1) Two follow-up inspections, and
- (2) Two warning letters or notices of violation.

v. Referral of Violations of the Industrial and Construction General Permits, including Requirements to File a Notice of Intent or No Exposure Certification

For those facilities or site operators in violation of municipal storm water ordinances and subject to the Industrial and/or Construction General Permits, Permittees may escalate referral of such violations to the Regional Water Board (promptly via telephone or electronically) after one inspection and one written notice of violation (copied to the Regional Water Board) to the facility or site operator regarding the violation. In making such referrals, Permittees shall include, at a minimum, the following documentation:

- (1) Name of the facility or site,
- (2) Operator of the facility or site,
- (3) Owner of the facility or site,
- (4) WDID Number (if applicable),
- (5) Records of communication with the facility/site operator regarding the violation, which shall include at least one inspection report,
- (6) The written notice of violation (copied to the Regional Water Board),
- (7) For industrial sites, the industrial activity being conducted at the facility that is subject to the Industrial General Permit, and
- (8) For construction sites, site acreage and Risk Factor rating.

b. Investigation of Complaints Transmitted by the Regional Water Board Staff

Each Permittee shall initiate, within one business day,²⁵ investigation of complaints from facilities within its jurisdiction. The initial investigation shall include, at a minimum, a limited inspection of the facility to confirm validity of the

²⁵ Permittees may comply with the Permit by taking initial steps (such as logging, prioritizing, and tasking) to “initiate” the investigation within that one business day. However, the Regional Water Board would expect that the initial investigation, including a site visit, to occur within four business days.

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complaint and to determine if the facility is in compliance with municipal storm water ordinances and, if necessary, to oversee corrective action.

c. Assistance with Regional Water Board Enforcement Actions

As directed by the Regional Water Board Executive Officer, Permittees shall assist Regional Water Board enforcement actions by:

- i. Assisting in identification of current owners, operators, and lessees of properties and sites.
- ii. Providing staff, when available, for joint inspections with Regional Water Board inspectors.
- iii. Appearing to testify as witnesses in Regional Water Board enforcement hearings.
- iv. Providing copies of inspection reports and documentation demonstrating application of its Progressive Enforcement Policy.

3. Modifications/Revisions

- a. Each Permittee shall modify its storm water management programs, protocols, practices, and municipal codes to make them consistent with the requirements in this Order.

4. Requirements Applicable to the Los Angeles County Flood Control District

a. Public Information and Participation Program (PIPP)

i. General

(1) The LACFCD shall participate in a regional Public Information and Participation Program (PIPP) or alternatively, shall implement its own PIPP that includes the requirements listed in this part. The LACFCD shall collaborate, as necessary, with other Permittees to implement PIPP requirements. The objectives of the PIPP are as follows:

- (a) To measurably increase the knowledge of the target audience about the MS4, the adverse impacts of storm water pollution on receiving waters and potential solutions to mitigate the impacts.
- (b) To measurably change the waste disposal and storm water pollution generation behavior of target audiences by encouraging the implementation of appropriate alternatives by providing information to the public.
- (c) To involve and engage a diversity of socio-economic groups and ethnic communities in Los Angeles County to participate in mitigating the impacts of stormwater pollution.

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ii. PIPP Implementation

- (1) The LACFCD shall implement the PIPP requirements listed in this Part VI.D.5 using one or more of the following approaches:
 - (a) By participating in a collaborative PIPP covering the entire service area of the Los Angeles County Flood Control District,
 - (b) By participating in one or more Watershed Group sponsored PIPPs, and/or
 - (c) Individually within the service area of the Los Angeles County Flood Control District.
- (2) If the LACFCD participates in a collaborative District-wide or Watershed Group PIPP, the LACFCD shall provide the contact information for their appropriate staff responsible for storm water public education activities to the designated PIPP coordinator and contact information changes no later than 30 days after a change occurs.

iii. Public Participation

- (1) The LACFCD, in collaboration with the County of Los Angeles, shall continue to maintain the countywide hotline (888-CLEAN-LA) for public reporting of clogged catch basin inlets and illicit discharges/dumping, faded or missing catch basin labels, and general storm water management information.
 - (a) The LACFCD shall include the reporting information, updated when necessary, in public information, and the government pages of the telephone book, as they are developed or published.
 - (b) The LACFCD, in collaboration with the County of Los Angeles, shall continue to maintain the www.888cleanla.com website.

iv. Residential Outreach Program

- (1) Working in conjunction with a District-wide or Watershed Group sponsored PIPP or individually, the LACFCD shall implement the following activities:
 - (a) Conduct storm water pollution prevention public service announcements and advertising campaigns
 - (b) Facilitate the dissemination of public education materials including, at a minimum, information on the proper handling (i.e., disposal, storage and/or use) of:
 - () Vehicle waste fluids
 - (i) Household waste materials (i.e., trash and household hazardous waste)
 - (ii) Construction waste materials

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- (iii) Pesticides and fertilizers (including integrated pest management practices [IPM] to promote reduced use of pesticides),
- (iv) Green waste (including lawn clippings and leaves)
- (v) Animal wastes
- (c) Facilitate the dissemination of activity-specific storm water pollution prevention public education materials, at a minimum, for the following points of purchase:
 - (i) Automotive parts stores
 - (ii) Home improvement centers / lumber yards / hardware stores / paint stores
 - (iii) Landscaping / gardening centers
 - (iv) Pet shops / feed stores
- (d) Maintain a storm water website, which shall include educational material and opportunities for the public to participate in storm water pollution prevention and clean-up activities listed in Part VI.D.5.
- (e) When implementing activities in (a)-(d), the LACFCD shall use effective strategies to educate and involve ethnic communities in storm water pollution prevention through culturally effective methods.

b. Industrial/Commercial Facilities Program

If the LACFCD operates, or has authority over, any facility(ies) identified in Part VI.D.6.b, LACFCD shall comply with the requirements in Part VI.D.6 for those facilities.

c. Public Agency Activities Program

i. General

- (1) The LACFCD shall implement a Public Agency Activities Program to minimize storm water pollution impacts from LACFCD-owned or operated facilities and activities. Requirements for Public Agency Facilities and Activities consist of the following components:
 - (a) Public Construction Activities Management.
 - (b) Public Facility Inventory
 - (c) Public Facility and Activity Management
 - (d) Vehicle and Equipment Washing
 - (e) Landscape and Recreational Facilities Management

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- (f) Storm Drain Operation and Maintenance
- (g) Parking Facilities Management
- (h) Emergency Procedures
- (i) Employee and Contractor Training

ii. Public Construction Activities Management

- (1) The LACFCD shall implement and comply with the Planning and Land Development Program requirements in Part VI.D.7 of this Order at LACFCD-owned or operated public construction projects that are categorized under the project types identified in Part VI.D.7 of this Order.
- (2) The LACFCD shall implement and comply with the appropriate Development Construction Program requirements in Part VI.D.8 of this Order at LACFCD-owned or operated construction projects as applicable.
- (3) For LACFCD-owned or operated projects that disturb less than one acre of soil, the LACFCD shall require the implementation of an effective combination of erosion and sediment control BMPs from Table 13 (see Construction Development Program).
- (4) The LACFCD shall obtain separate coverage under the Construction General Permit for all LACFCD-owned or operated construction sites that require coverage.

iii. Public Facility Inventory

- (1) The LACFCD shall maintain an updated watershed-based inventory and map of all LACFCD-owned or operated facilities that are potential sources of storm water pollution. The incorporation of facility information into a GIS is recommended. Sources to be tracked include but are not limited to the following:
 - (a) Chemical storage facilities
 - (b) Equipment storage and maintenance facilities (including landscape maintenance-related operations)
 - (c) Fueling or fuel storage facilities
 - (d) Materials storage yards
 - (e) Pesticide storage facilities
 - (f) LACFCD buildings
 - (g) LACFCD vehicle storage and maintenance yards
 - (h) All other LACFCD-owned or operated facilities or activities that the LACFCD determines may contribute a substantial pollutant load to the MS4.

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- (2) The LACFCD shall include the following minimum fields of information for each LACFCD-owned or operated facility in its watershed-based inventory and map.
- (a) Name of facility
 - (b) Name of facility manager and contact information
 - (c) Address of facility (physical and mailing)
 - (d) A narrative description of activities performed and principal products used at each facility and status of exposure to storm water.
 - (e) Coverage under the Industrial General Permit or other individual or general NPDES permits or any applicable waiver issued by the Regional or State Water Board pertaining to storm water discharges.
- (3) The LACFCD shall update its inventory and map once during the Permit term. The update shall be accomplished through a collection of new information obtained through field activities.

iv. Public Agency Facility and Activity Management

- (1) The LACFCD shall obtain separate coverage under the Industrial General Permit for all LACFCD-owned or operated facilities where industrial activities are conducted that require coverage under the Industrial General Permit.
- (2) The LACFCD shall implement the following measures for flood management projects:
- (a) Develop procedures to assess the impacts of flood management projects on the water quality of receiving waterbodies; and
 - (b) Evaluate existing structural flood control facilities during the planning phases of major maintenance or rehabilitation projects to determine if retrofitting the facility to provide additional pollutant removal from storm water is feasible.

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- (3) The LACFCD shall implement and maintain the general and activity-specific BMPs listed in Table 18 (BMPs for Public Agency Facilities and Activities) or an equivalent set of BMPs when such activities occur at LACFCD-owned or operated facilities and field activities (e.g., project sites) including but not limited to the facility types listed in Part VI.D.9.c above, and at any area that includes the activities described in Table 18, or that have the potential to discharge pollutants in storm water.
- (4) Any contractors hired by the LACFCD to conduct Public Agency Activities shall be contractually required to implement and maintain the general and activity specific BMPs listed in Table 18 or an equivalent set of BMPs. The LACFCD shall conduct oversight of contractor activities to ensure these BMPs are implemented and maintained.
- (5) Effective source control BMPs for the activities listed in Table 18 shall be implemented at LACFCD-owned or operated facilities, unless the pollutant generating activity does not occur. The LACFCD shall require implementation of additional BMPs where storm water from the MS4 discharges to a significant ecological area (SEA, see Attachment A for definition), a water body subject to TMDL Provisions in Part VI.E, or a CWA section 303(d) listed water body (see Part VI.E below). Likewise, for those BMPs that are not adequately protective of water quality standards, the LACFCD shall implement additional site-specific controls.

v. Vehicle and Equipment Washing

- (1) The LACFCD shall implement and maintain the activity specific BMPs listed in Table 18 (BMPs for Public Agency Facilities and Activities) or an equivalent set of BMPs for all fixed vehicle and equipment washing areas;
- (2) The LACFCD shall prevent discharges of wash waters from vehicle and equipment washing to the MS4 by implementing any of the following measures at existing facilities with vehicle or equipment wash areas:
 - (a) Self-contain, and haul off for disposal; or
 - (b) Equip with a clarifier or an alternative pre-treatment device and plumb to the sanitary sewer in accordance with applicable waste water provider regulations

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- (3) The LACFCD shall ensure that any LACFCD facilities constructed, redeveloped, or replaced shall not discharge wastewater from vehicle and equipment wash areas to the MS4 by plumbing all areas to the sanitary sewer in accordance with applicable waste water provider regulations, or self-containing all waste water/ wash water and hauling to a point of legal disposal.

vi. Landscape and Recreational Facilities Management

- (1) The LACFCD shall implement and maintain the activity specific BMPs listed in Table 18 (BMPs for Public Agency Facilities and Activities) or an equivalent set of BMPs for all its public right-of-ways, flood control facilities and open channels and reservoirs, and landscape and recreational facilities and activities.
- (2) The LACFCD shall implement an IPM program that includes the following:
- (a) Pesticides are used only if monitoring indicates they are needed, and pesticides are applied according to applicable permits and established guidelines.
 - (b) Treatments are made with the goal of removing only the target organism.
 - (c) Pest controls are selected and applied in a manner that minimizes risks to human health, beneficial non-target organisms, and the environment.
 - (d) The use of pesticides, including Organophosphates and Pyrethroids, does not threaten water quality.
 - (e) Partner, as appropriate, with other agencies and organizations to encourage the use of IPM.
 - (f) Adopt and verifiably implement policies, procedures, and/ or ordinances requiring the minimization of pesticide use and encouraging the use of IPM techniques (including beneficial insects) for Public Agency Facilities and Activities.
 - (g) Policies, procedures, and ordinances shall include a schedule to reduce the use of pesticides that cause impairment of surface waters by implementing the following procedures:
 - (i) Prepare and annually update an inventory of pesticides used by all internal departments, divisions, and other operational units.
 - (ii) Quantify pesticide use by staff and hired contractors.
 - (iii) Demonstrate implementation of IPM alternatives where feasible to reduce pesticide use.

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- (3) The LACFCD shall implement the following requirements:
- (a) Use a standardized protocol for the routine and non-routine application of pesticides (including pre-emergents), and fertilizers.
 - (b) Ensure no application of pesticides or fertilizers are applied to an area immediately prior to, during or immediately after a rain event, or when water is flowing off the area.
 - (c) Ensure that no banned or unregistered pesticides are stored or applied.
 - (d) Ensure that all staff applying pesticides are certified in the appropriate category by the California Department of Pesticide Regulation, or are under the direct supervision of a pesticide applicator certified in the appropriate category.
 - (e) Implement procedures to encourage the retention and planting of native vegetation to reduce water, pesticide and fertilizer needs; and
 - (f) Store pesticides and fertilizers indoors or under cover on paved surfaces, or use secondary containment.
 - (i) Reduce the use, storage, and handling of hazardous materials to reduce the potential for spills.
 - (ii) Regularly inspect storage areas.

vii. Storm Drain Operation and Management

- (1) The LACFCD shall implement and maintain the activity specific BMPs listed in Table 18 or equivalent set of BMPs for storm drain operation and maintenance.
- (2) Ensure that all the material removed from the MS4 does not reenter the system. Solid material shall be dewatered in a contained area and liquid material shall be disposed in accordance with any of the following measures:
 - (a) Self-contain, and haul off for legal disposal; or
 - (b) Equip with a clarifier or an alternative pre-treatment device; and plumb to the sanitary sewer in accordance with applicable waste water provider regulations.
- (3) Catch Basin Cleaning
 - (a) In areas that are not subject to a trash TMDL, the LACFCD shall determine priority areas and shall update its map or list of catch basins with their GPS coordinates and priority:
 - Priority A: Catch basins that are designated as consistently generating the highest volumes of trash and/or debris.

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Priority B: Catch basins that are designated as consistently generating moderate volumes of trash and/or debris.

Priority C: Catch basins that are designated as generating low volumes of trash and/or debris.

The map or list shall contain the rationale or data to support priority designations.

(b) In areas not subject to a trash TMDL, the LACFCD shall inspect its catch basins according to the following schedule:

Priority A: A minimum of 3 times during the wet season (October 1 through April 15) and once during the dry season every year.

Priority B: A minimum of once during the wet season and once during the dry season every year.

Priority C: A minimum of once per year.

Catch basins shall be cleaned as necessary on the basis of inspections. At a minimum, LACFCD shall ensure that any catch basin that is determined to be at least 25% full of trash shall be cleaned out. LACFCD shall maintain inspection and cleaning records for Regional Water Board review.

(c) In areas that are subject to a trash TMDL, the subject Permittees shall implement the applicable provisions in Part VI.E.

(4) Catch Basin Labels and Open Channel Signage

(a) LACFCD shall label all catch basin inlets that they own with a legible "no dumping" message.

(b) The LACFCD shall inspect the legibility of the catch basin stencil or label nearest the inlet prior to the wet season every year.

(c) The LACFCD shall record all catch basins with illegible stencils and re-stencil or re-label within 180 days of inspection.

(d) The LACFCD shall post signs, referencing local code(s) that prohibit littering and illegal dumping, at designated public access points to open channels, creeks, urban lakes, and other relevant waterbodies.

(5) Open Channel Maintenance

The LACFCD shall implement a program for Open Channel Maintenance that includes the following:

(a) Visual monitoring of LACFCD owned open channels and other drainage structures for trash and debris at least annually;

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- (b) Removal of trash and debris from open channels a minimum of once per year before the wet season;
 - (c) Elimination of the discharge of contaminants produced by storm drain maintenance and clean outs; and
 - (d) Proper disposal of debris and trash removed during open channel maintenance.
- (6) Infiltration from Sanitary Sewer to MS4/Preventive Maintenance
- (a) The LACFCD shall implement controls and measures to prevent and eliminate infiltration of seepage from sanitary sewers to its MS4 thorough routine preventive maintenance of its MS4.
 - (b) The LACFCD shall implement controls to limit infiltration of seepage from sanitary sewers to its MS4 where necessary. Such controls must include:
 - (i) Adequate plan checking for construction and new development;
 - (ii) Incident response training for its employees that identify sanitary sewer spills;
 - (iii) Code enforcement inspections;
 - (iv) MS4 maintenance and inspections;
 - (v) Interagency coordination with sewer agencies; and
 - (vi) Proper education of its staff and contractors conducting field operations on its MS4.
- (7) LACFCD-Owned Treatment Control BMPs
- (a) The LACFCD shall implement an inspection and maintenance program for all LACFCD-owned treatment control BMPs, including post-construction treatment control BMPs.
 - (b) The LACFCD shall ensure proper operation of all its treatment control BMPs and maintain them as necessary for proper operation, including all post-construction treatment control BMPs.
 - (c) Any residual water produced by a treatment control BMP and not being internal to the BMP performance when being maintained shall be:
 - (i) Hauled away and legally disposed of; or
 - (ii) Applied to the land without runoff; or
 - (iii) Discharged to the sanitary sewer system (with permits or authorization); or
 - (iv) Treated or filtered to remove bacteria, sediments, nutrients, and meet the limitations set in Table 19 (Discharge Limitations

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for Dewatering Treatment BMPs), prior to discharge to the MS4.

viii. Parking Facilities Management

LACFCD-owned parking lots exposed to storm water shall be kept clear of debris and excessive oil buildup and cleaned no less than 2 times per month and/or inspected no less than 2 times per month to determine if cleaning is necessary. In no case shall a LACFCD-owned parking lot be cleaned less than once a month.

ix. Emergency Procedures

The LACFCD may conduct repairs and rehabilitation of essential public service systems and infrastructure in emergency situations with a self-waiver of the provisions of this Order as follows:

- (1) The LACFCD shall abide by all other regulatory requirements, including notification to other agencies as appropriate.
- (2) Where the self-waiver has been invoked, the LACFCD shall notify the Regional Water Board Executive Officer of the occurrence of the emergency no later than 30 business days after the situation of emergency has passed.
- (3) Minor repairs of essential public service systems and infrastructure in emergency situations (that can be completed in less than one week) are not subject to the notification provisions. Appropriate BMPs to reduce the threat to water quality shall be implemented.

x. Employee and Contractor Training

- (1) The LACFCD shall, no later than one year after Order adoption and annually thereafter before June 30, train all of their employees and contractors in targeted positions (whose interactions, jobs, and activities affect storm water quality) on the requirements of the overall storm water management program to:
 - (a) Promote a clear understanding of the potential for activities to pollute storm water.
 - (b) Identify opportunities to require, implement, and maintain appropriate BMPs in their line of work.
- (2) The LACFCD shall, no later than one year after Order adoption and annually thereafter before June 30, train all of their employees and contractors who use or have the potential to use pesticides or fertilizers (whether or not they normally apply these as part of their work). Training programs shall address:
 - (a) The potential for pesticide-related surface water toxicity.

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- (b) Proper use, handling, and disposal of pesticides.
- (c) Least toxic methods of pest prevention and control, including IPM.
- (d) Reduction of pesticide use.
- (3) The LACFCD shall require appropriate training of contractor employees in targeted positions as described above.

d. Illicit Connections and Illicit Discharge Elimination Program

i. General

- (1) The LACFCD shall continue to implement an Illicit Connection and Illicit Discharge (IC/ID) Program to detect, investigate, and eliminate IC/IDs to its MS4. The IC/ID Program must be implemented in accordance with the requirements and performance measures specified in the following subsections.
- (2) As stated in Part VI.A.2 of this Order, each Permittee must have adequate legal authority to prohibit IC/IDs to the MS4 and enable enforcement capabilities to eliminate the source of IC/IDs.
- (3) The LACFCD's IC/ID Program shall consist of at least the following major program components:
 - (a) An up-to-date map of LACFCD's MS4
 - (b) Procedures for conducting source investigations for IC/IDs
 - (c) Procedures for eliminating the source of IC/IDs
 - (d) Procedures for public reporting of illicit discharges
 - (e) Spill response plan
 - (f) IC/IDs education and training for LACFCD staff

ii. MS4 Mapping

- (1) The LACFCD shall maintain an up-to-date and accurate electronic map of its MS4. If possible, the map should be maintained within a GIS. The map must show the following, at a minimum:
 - (a) Within one year of Permit adoption, the location of outfalls owned and maintained by the LACFCD. Each outfall shall be given an alphanumeric identifier, which must be noted on the map. Each mapped outfall shall be located using a geographic positioning system (GPS). Photographs of the major outfalls shall be taken to provide baseline information to track operation and maintenance needs over time.
 - (b) The location and length of open channels and underground storm drain pipes with a diameter of 36 inches or greater that are owned and operated by the LACFCD.

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- (c) The location and name of all waterbodies receiving discharges from those MS4 major outfalls identified in (a).
 - (d) All LACFCD's dry weather diversions installed within the MS4 to direct flows from the MS4 to the sanitary sewer system, including the owner and operator of each diversion.
 - (e) By the end of the Permit term, map all known permitted and documented connections to its MS4 system.
- (2) The MS4 map shall be updated as necessary.

iii. Illicit Discharge Source Investigation and Elimination

- (1) The LACFCD shall develop written procedures for conducting investigations to prioritize and identify the source of all illicit discharges to its MS4, including procedures to eliminate the discharge once the source is located.
- (2) At a minimum, the LACFCD shall initiate²⁶ an investigation(s) to identify and locate the source within one business day of becoming aware of the illicit discharge.
- (3) When conducting investigations, the LACFCD shall comply with the following:
 - (a) Illicit discharges suspected of being sanitary sewage and/or significantly contaminated shall be investigated first.
 - (b) The LACFCD shall track all investigations to document, at a minimum, the date(s) the illicit discharge was observed; the results of the investigation; any follow-up of the investigation; and the date the investigation was closed.
 - (c) The LACFCD shall prioritize and investigate the source of all observed illicit discharges to its MS4.
 - (d) If the source of the illicit discharge is found to be a discharge authorized under an NPDES permit, the LACFCD shall document the source and report to the Regional Water Board within 30 days of determination. No further action is required.
 - (e) If the source of the illicit discharge has been determined to originate from within the jurisdiction of other Permittee(s) with land use authority over the suspected responsible party/parties, the LACFCD shall immediately alert the appropriate Permittee(s) of the problem for further action by the Permittee(s).

²⁶ Permittees may comply with the Permit by taking initial steps (such as logging, prioritizing, and tasking) to "initiate" the investigation within one business day. However, the Regional Water Board would expect that the initial investigation, including a site visit, occur within two business days of becoming aware of the illicit discharge.

- (4) When taking corrective action to eliminate illicit discharges, the LACFCD shall comply with the following:
- (a) If the source of the illicit discharge has been determined or suspected by the LACFCD to originate within an upstream jurisdiction(s), the LACFCD shall immediately notify the upstream jurisdiction(s), and notify the Regional Water Board within 30 days of such determination and provide all the information collected and efforts taken.
- (b) Once the Permittee with land use authority over the suspected responsible party/parties has been alerted, the LACFCD may continue to work in cooperation with the Permittee(s) to notify the responsible party/parties of the problem, and require the responsible party/parties to immediately initiate necessary corrective actions to eliminate the illicit discharge. Upon being notified that the discharge has been eliminated, the LACFCD may, in conjunction with the Permittee(s) conduct a follow-up investigation to verify that the discharge has been eliminated and cleaned up to the satisfaction of the LACFCD. The LACFCD shall document its follow-up investigation. The LACFCD may seek recovery and remediation costs from responsible parties or require compensation for the cost of all inspection and investigation activities. Resulting enforcement actions shall follow the program's Progressive Enforcement Policy.
- (c) If the source of the illicit discharge cannot be traced to a suspected responsible party, the LACFCD, in conjunction with other affected Permittees, shall continue implementing the illicit discharge/spill response plan.
- (5) In the event the LACFCD and/or other Permittees are unable to eliminate an ongoing illicit discharge following full execution of its legal authority and in accordance with its Progressive Enforcement Policy, including the inability to find the responsible party/parties, or other circumstances prevent the full elimination of an ongoing illicit discharge, the LACFCD and/or other Permittees shall notify the Regional Water Board within 30 days of such determination and provide available information to the Regional Water Board.

iv. Identification and Response to Illicit Connections

(1) Investigation

The LACFCD, upon discovery or upon receiving a report of a suspected illicit connection, shall initiate an investigation within 21 days, to determine the following: (1) source of the connection, (2) nature and volume of discharge through the connection, and (3) responsible party for the connection.

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(2) Elimination

The LACFCD, upon confirmation of an illicit connection to its MS4, shall ensure that the connection is:

(a) Permitted or documented, provided the connection will only discharge storm water and non-storm water allowable under this Order or other individual or general NPDES Permits/WDRs, or

(b) Eliminated within 180 days of completion of the investigation, using its formal enforcement authority, if necessary, to eliminate the illicit connection.

(3) Documentation

Formal records must be maintained for all illicit connection investigations and the formal enforcement taken to eliminate illicit connections.

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v. Public Reporting of Non-Stormwater Discharges and Spills

- (1) The LACFCD shall, in collaboration with the County, continue to maintain the 888-CLEAN-LA hotline and corresponding internet site at www.888cleanla.org to promote, publicize, and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into or from MS4s.
- (2) The LACFCD shall include information regarding public reporting of illicit discharges or improper disposal on the signage adjacent to open channels as required in Part VI.D.9.h.vi.(4).
- (3) The LACFCD shall develop and maintain written procedures that document how complaint calls and internet submissions are received, documented, and tracked to ensure that all complaints are adequately addressed. The procedures shall be evaluated annually to determine whether changes or updates are needed to ensure that the procedures accurately document the methods employed by the LACFCD. Any identified changes shall be made to the procedures subsequent to the annual evaluation.
- (4) The LACFCD shall maintain documentation of the complaint calls and internet submissions and record the location of the reported spill or IC/ID and the actions undertaken, including referrals to other agencies, in response to all IC/ID complaints.

vi. Illicit Discharge and Spill Response Plan

- (1) The LACFCD shall implement an ID and spill response plan for all spills that may discharge into its system. The ID and spill response plan shall clearly identify agencies responsible for ID and spill response and cleanup, contact information, and shall contain at a minimum the following requirements:
 - (a) Coordination with spill response teams throughout all appropriate departments, programs and agencies so that maximum water quality protection is provided.
 - (b) Initiation of investigation of all public and employee ID and spill complaints within one business day of receiving the complaint to assess validity.
 - (c) Response to ID and spills within 4 hours of becoming aware of the ID or spill, except where such IDs or spills occur on private property, in which case the response should be within 2 hours of gaining legal access to the property.
 - (d) IDs or spills that may endanger health or the environment shall be reported to appropriate public health agencies and the Office of Emergency Services (OES).

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vii. Illicit Connection and Illicit Discharge Education and Training

- (1) The LACFCD must continue to implement a training program regarding the identification of IC/IDs for all LACFCD field staff, who, as part of their normal job responsibilities (e.g., storm drain inspection and maintenance), may come into contact with or otherwise observe an illicit discharge or illicit connection to its MS4. Contact information, including the procedure for reporting an illicit discharge, must be included in the LACFCD's fleet vehicles that are used by field staff. Training program documents must be available for review by the Regional Water Board.
- (2) The LACFCD's training program should address, at a minimum, the following:
 - (a) IC/ID identification, including definitions and examples,
 - (b) investigation,
 - (c) elimination,
 - (d) cleanup,
 - (e) reporting, and
 - (f) documentation.
- (3) The LACFCD must create a list of applicable positions which require IC/ID training and ensure that training is provided at least twice during the term of this Order. The LACFCD must maintain documentation of the training activities.
- (4) New LACFCD staff members must be provided with IC/ID training within 180 days of starting employment.
- (5) The LACFCD shall require its contractors to train their employees in targeted positions as described above.

4.5. Public Information and Participation Program**a. General**

- i. Each Permittee shall implement a Public Information and Participation Program (PIPP) that includes, ~~but is not limited to,~~ the requirements listed in this Part VI.D.45. Each Permittee shall be responsible for developing and implementing the PIPP and implementing specific PIPP requirements. The objectives of the PIPP are as follows:
 - (1) To measurably increase the knowledge of the target audiences about the MS4, the adverse impacts of storm water pollution on receiving waters and potential solutions to mitigate the impacts.
 - (2) To measurably change the waste disposal and storm water pollution generation behavior of target audiences by developing and encouraging the implementation of appropriate alternatives.

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- (3) To involve and engage a diversity of socio-economic groups and ethnic communities in Los Angeles County to participate in mitigating the impacts of storm water pollution.

b. PIPP Implementation

- i. Each Permittee shall implement the PIPP requirements listed in this Part VI.D.4 using one or more of the following approaches:
 - (1) By participating in a County-wide PIPP,
 - (2) By participating in one or more Watershed Group sponsored PIPPs, and/or
 - (3) Or individually within its jurisdiction.
- ii. If a Permittee participates in a County-wide or Watershed Group PIPP, the Permittee shall provide the contact information for their appropriate staff responsible for storm water public education activities to the designated PIPP coordinator and contact information changes no later than 30 days after a change occurs.

c. Public Participation

- i. Each Permittee, whether participating in a County-wide or Watershed Group sponsored PIPP, or acting individually, shall provide a means for public reporting of clogged catch basin inlets and illicit discharges/dumping, faded or missing catch basin labels, and general storm water and non-storm water pollution prevention information.
 - (1) Permittees may elect to use the 888-CLEAN-LA hotline as the general public reporting contact or each Permittee or Watershed Group may establish its own hotline, if preferred.
 - (2) Each Permittee shall include the reporting information, updated when necessary, in public information, and the government pages of the telephone book, as they are developed or published.
 - (3) Each Permittee shall identify staff or departments who will serve as the contact person(s) and shall make this information available on its website.
 - (4) Each Permittee is responsible for providing current, updated hotline contact information to the general public within its jurisdiction.
- ii. Organize events targeted to residents and population subgroups to educate and involve the community in storm water and non-storm water pollution prevention and clean-up (e.g., education seminars, clean-ups, and community catch basin stenciling).

d. Residential Outreach Program

- i. Working in conjunction with a County-wide or Watershed Group sponsored PIPP or individually, each Permittee shall implement the following activities:

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- (1) Conduct storm water pollution prevention public service announcements and advertising campaigns
- (2) Public education materials shall include but are not limited to information on the proper handling (i.e., disposal, storage and/or use) of:
 - (a) Vehicle waste fluids
 - (b) Household waste materials (i.e., trash and household hazardous waste, including personal care products and pharmaceuticals)
 - (c) Construction waste materials
 - (d) Pesticides and fertilizers (including integrated pest management practices [IPM] to promote reduced use of pesticides)
 - (e) Green waste (including lawn clippings and leaves)
 - (f) Animal wastes
- (3) Distribute activity specific storm water pollution prevention public education materials at, but not limited to, the following points of purchase:
 - (a) Automotive parts stores
 - (b) Home improvement centers / lumber yards / hardware stores/paint stores
 - (c) Landscaping / gardening centers
 - ~~(d) Pharmacies~~
 - ~~(e)~~(d) Pet shops / feed stores
- (4) Maintain storm water websites or provide links to storm water websites via the Permittee’s website, which shall include educational material and opportunities for the public to participate in storm water pollution prevention and clean-up activities listed in Part VI.D.4.
- (5) Provide independent, parochial, and public schools within in each Permittee’s jurisdiction with materials to educate school children (K-12) on storm water pollution. Material may include videos, live presentations, and other information. Permittees are encouraged to work with, or leverage, materials produced by other statewide agencies and associations such as the State Water Board’s “Erase the Waste” educational program and the California Environmental Education Interagency Network (CEEIN) to implement this requirement.
- (6) When implementing activities in subsections (1)-(5), Permittees shall use effective strategies to educate and involve ethnic communities in storm water pollution prevention through culturally effective methods.

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5-6. Industrial/Commercial Facilities Program

a. General

- i. Each Permittee shall implement an Industrial / Commercial Facilities Program that meets the requirements of this Part VI.D.56. The Industrial / Commercial Facilities Program shall be designed to prevent illicit discharges into the MS4 and receiving waters, reduce industrial / commercial discharges of storm water to the maximum extent practicable, and prevent industrial / commercial discharges from the MS4 from causing or contributing to a violation of receiving water limitations. At a minimum, the Industrial / Commercial Facilities Program shall be implemented in accordance with the requirements listed in this Part VI.D.56, or as approved in a Watershed Management Program per Part VI.C. Minimum program components shall include the following components:

- (1) Track
- (2) Educate
- (3) Inspect
- (4) Ensure compliance with municipal ordinances at industrial and commercial facilities that are critical sources of pollutants in storm water

b. Track Critical Industrial / Commercial Sources

- i. Each Permittee shall maintain an updated watershed-based inventory or database containing the latitude / longitude coordinates of all industrial and commercial facilities within its jurisdiction that are critical sources of storm water pollution. The inventory or database shall be maintained in electronic format and incorporation of facility information into a Geographical Information System (GIS) is recommended. Critical Sources to be tracked are summarized below:

- (1) Commercial Facilities
 - (a) Restaurants
 - (b) Automotive service facilities (including those located at automotive dealerships)
 - (c) Retail Gasoline Outlets
 - (d) Nurseries and Nursery Centers (Merchant Wholesalers, Nondurable Goods, and Retail Trade)
- (2) USEPA "Phase I" Facilities [as specified in 40 CFR §122.26(b)(14)(i)-(xi)]
- (3) Other federally-mandated facilities [as specified in 40 CFR §122.26(d)(2)(iv)(C)]
 - (a) Municipal landfills
 - (b) Hazardous waste treatment, disposal, and recovery facilities
 - (c) Industrial facilities subject to section 313 "Toxic Release Inventory" reporting requirements of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) [42 U.S.C. § 11023]

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(4) All other commercial or industrial facilities that the Permittee determines may contribute a substantial pollutant load to the MS4.

ii. Each Permittee shall include the following minimum fields of information for each critical source industrial and commercial facility identified in its watershed-based inventory or database:

- (1) Name of facility
- (2) Name of owner/ operator and contact information
- (3) Address of facility (physical and mailing)
- (4) North American Industry Classification System (NAICS) code
- (5) Standard Industrial Classification (SIC) code
- (6) A narrative description of the activities performed and/or principal products produced
- (7) Status of exposure of materials to storm water
- (8) Name of receiving water
- (9) Identification of whether the facility is tributary to a CWA § 303(d) listed water body segment or water body segment subject to a TMDL, where the facility generates pollutants for which the water body segment is impaired.
- (10) Ability to denote if the facility is known to maintain coverage under the State Water Board's General NPDES Permit for the Discharge of Stormwater Associated with Industrial Activities (Industrial General Permit) or other individual or general NPDES permits or any applicable waiver issued by the Regional or State Water Board pertaining to storm water discharges.
- (11) Ability to denote if the facility has filed a No Exposure Certification with the State Water Board.

iii. Each Permittee shall update its inventory of critical sources at least annually. The update shall be accomplished through collection of new information obtained through field activities or through other readily available inter- and intra-agency informational databases (e.g., business licenses, pretreatment permits, sanitary sewer connection permits, and similar information).

c. Educate Industrial / Commercial Sources

i. At least once during the five-year period of this Order, each Permittee shall notify the owner/operator of each of its inventoried commercial and industrial sites identified in Part VI.D.56.b of the BMP requirements applicable to the site/source.

ii. Business Assistance Program

- (1) Each Permittee shall implement a Business Assistance Program to provide technical information to businesses to facilitate their efforts to

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reduce the discharge of pollutants in storm water. Assistance shall be targeted to select business sectors or small businesses upon a determination that their activities may be contributing substantial pollutant loads to the MS4 or receiving water. Assistance may include technical guidance and provision of educational materials. The Program may include:

- (a) On-site technical assistance, telephone, or e-mail consultation regarding the responsibilities of business to reduce the discharge of pollutants, procedural requirements, and available guidance documents.
- (b) Distribution of storm water pollution prevention educational materials to operators of auto repair shops; car wash facilities; restaurants and mobile sources including automobile/equipment repair, washing, or detailing; power washing services; mobile carpet, drape, or upholstery cleaning services; swimming pool, water softener, and spa services; portable sanitary services; and commercial applicators and distributors of pesticides, herbicides and fertilizers, if present.

d. Inspect Critical Commercial Sources

i. Frequency of Mandatory Commercial Facility Inspections

Each Permittee shall inspect all commercial facilities identified in Part VI.D.56.b twice during the 5-year term of the Order, provided that the first mandatory compliance inspection occurs no later than 2 years after the effective date of this Order. A minimum interval of 6 months between the first and the second mandatory compliance inspection is required. In addition, each Permittee shall implement the activities outlined in the following subparts.

ii. Scope of Mandatory Commercial Facility Inspections

Each Permittee shall inspect all commercial facilities to confirm that storm water and non-storm water BMPs are being effectively implemented in compliance with municipal ordinances. At each facility, inspectors shall verify that the operator is implementing effective source control BMPs for each corresponding activity. Each Permittee shall require implementation of additional BMPs where storm water from the MS4 discharges to a significant ecological area (SEA), a water body subject to TMDL provisions in Part VI.E, or a CWA § 303(d) listed impaired water body. Likewise, for those BMPs that are not adequately protective of water quality standards, a Permittee may require additional site-specific controls.

e. Inspect Critical Industrial Sources

Each Permittee shall conduct industrial facility compliance inspections as specified below.

i. Frequency of Mandatory Industrial Facility Compliance Inspections

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(1) Minimum Inspection Frequency

Each Permittee shall perform an initial mandatory compliance inspection at all industrial facilities identified in Part VI.D.56.b no later than 2 years after the effective date of this Order. After the initial inspection, all facilities that have not filed a No Exposure Certification with the State Water Board are subject to a second mandatory compliance inspection. A minimum interval of 6 months between the first and the second mandatory compliance inspection is required. A facility need not be inspected more than twice during the term of the Order unless subject to an enforcement action as specified in Part VI.D.56.h below.

(2) Exclusion of Facilities Previously Inspected by the Regional Water Board

Each Permittee shall review the State Water Board's Storm Water Multiple Application and Report Tracking System (SMARTS) database²⁷ at defined intervals to determine if an industrial facility has recently been inspected by the Regional Water Board. The first interval shall occur approximately 2 years after the effective date of the Order. The Permittee does not need to inspect the facility if it is determined that the Regional Water Board conducted an inspection of the facility within the prior 24 month period. The second interval shall occur approximately 4 years after the effective date of the Order. Likewise, the Permittee does not need to inspect the facility if it is determined that the Regional Water Board conducted an inspection of the facility within the prior 24 month period.

(3) No Exposure Verification

As a component of the first mandatory inspection, each Permittee shall identify those facilities that have filed a No Exposure Certification with the State Water Board. Approximately 3 to 4 years after the effective date of the Order, each Permittee shall evaluate its inventory of industrial facilities and perform a second mandatory compliance inspection at a minimum of 25% of the facilities identified to have filed a No Exposure Certification. The purpose of this inspection is to verify the continuity of the no exposure status.

(4) Exclusion Based on Watershed Management Program

A Permittee is exempt from the mandatory inspection frequencies listed above if it is implementing industrial inspections in accordance with an approved Watershed Management Program per Part VI.C.

ii. Scope of Mandatory Industrial Facility Inspections

Each Permittee shall confirm that each industrial facility:

- (1) Has a current Waste Discharge Identification (WDID) number for coverage under the Industrial General Permit, and that a Storm Water Pollution Prevention Plan (SWPPP) is available on-site; *or*

²⁷ SMARTS is accessible at <https://smarts.waterboards.ca.gov/smarts/faces/SwSmartsLogin.jsp>

- (2) Has applied for, and has received a current No Exposure Certification for facilities subject to this requirement;
- (3) Is effectively implementing BMPs in compliance with municipal ordinances. Facilities must implement the source control BMPs identified in Table 10, unless the pollutant generating activity does not occur. The Permittees shall require implementation of additional BMPs where storm water from the MS4 discharges to an environmentally sensitive area, a water body subject to TMDL Provisions in Part VI.E, or a CWA § 303(d) listed impaired water body. Likewise, if the specified BMPs are not adequately protective of water quality standards, a Permittee may require additional site-specific controls.
- (4) Applicable industrial facilities identified as not having either a current WDID or No Exposure Certification shall be notified that they must obtain coverage under the Industrial General Permit and shall be referred to the Regional Water Board per the Progressive Enforcement Policy procedures identified in Part VI.D.2.

f. Source Control BMPs for Commercial and Industrial Facilities

Effective source control BMPs for the activities listed in Table 10 shall be implemented at commercial and industrial facilities, unless the pollutant generating activity does not occur:

Table 10. Source Control BMPs at Commercial and Industrial Facilities

Pollutant-Generating Activity	BMP Narrative Description
Unauthorized Non-Storm water Discharges	Effective elimination of non-storm water discharges
Accidental Spills/ Leaks	Implementation of effective spills/ leaks prevention and response procedures
Vehicle/ Equipment Fueling	Implementation of effective fueling source control devices and practices
Vehicle/ Equipment Cleaning	Implementation of effective equipment/ vehicle cleaning practices and appropriate wash water management practices
Vehicle/ Equipment Repair	Implementation of effective vehicle/ equipment repair practices and source control devices
Outdoor Liquid Storage	Implementation of effective outdoor liquid storage source controls and practices
Outdoor Equipment Operations	Implementation of effective outdoor equipment source control devices and practices
Outdoor Storage of Raw Materials	Implementation of effective source control practices and structural devices
Storage and Handling of Solid Waste	Implementation of effective solid waste storage/ handling practices and appropriate control measures

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Pollutant-Generating Activity	BMP Narrative Description
Building and Grounds Maintenance	Implementation of effective facility maintenance practices
Parking/ Storage Area Maintenance	Implementation of effective parking/ storage area designs and housekeeping/ maintenance practices
Storm water Conveyance System Maintenance Practices	Implementation of proper conveyance system operation and maintenance protocols
Pollutant-Generating Activity	BMP Narrative Description from Regional Water Board Resolution No. 98-08
Sidewalk Washing	<ol style="list-style-type: none"> 1. Remove trash, debris, and free standing oil/grease spills/leaks (use absorbent material, if necessary) from the area before washing; and 2. Use high pressure, low volume spray washing using only potable water with no cleaning agents at an average usage of 0.006 gallons per square feet of sidewalk area.
Street Washing	Collect and divert wash water to the sanitary sewer – publically owned treatment works (POTW). Note: POTW approval may be needed.

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g. Significant Ecological Areas (SEAs)

For critical sources that discharge to MS4s that discharge to SEAs, each Permittee shall require operators to implement additional pollutant-specific controls to reduce pollutants in storm water runoff that are causing or contributing to exceedances of water quality standards.

h. Progressive Enforcement

Each Permittee shall implement its Progressive Enforcement Policy to ensure that Industrial / Commercial facilities are brought into compliance with all storm water requirements within a reasonable time period. See Part VI.D.2 for requirements for the development and implementation of a Progressive Enforcement Policy.

6-7. Planning and Land Development Program

a. Purpose

- i. Each Permittee shall implement a Planning and Land Development Program pursuant to Part VI.D.67.b for all New Development and Redevelopment projects subject to this Order to:

- (1) Lessen the water quality impacts of development by using smart growth practices such as compact development, directing development towards existing communities via infill or redevelopment, and safeguarding of environmentally sensitive areas.
- (2) Minimize the adverse impacts from storm water runoff on the biological integrity of Natural Drainage Systems and the beneficial uses of water bodies in accordance with requirements under CEQA (Cal. Pub. Resources Code § 21000 et seq.).
- (3) Minimize the percentage of impervious surfaces on land developments by minimizing soil compaction during construction, designing projects to minimize the impervious area footprint, and employing Low Impact Development (LID) design principles to mimic predevelopment ~~water balance~~ hydrology through infiltration, evapotranspiration and rainfall harvest and use.
- (4) Maintain existing riparian buffers and enhance riparian buffers when possible.
- (5) Minimize pollutant loadings from impervious surfaces such as roof tops, parking lots, and roadways through the use of properly designed, technically appropriate BMPs (including Source Control BMPs such as good housekeeping practices), LID Strategies, and Treatment Control BMPs.
- (6) Properly select, design and maintain LID and Hydromodification Control BMPs to address pollutants that are likely to be generated, reduce changes to pre-development hydrology, assure long-term function, and avoid the breeding of vectors²⁸.
- (7) Prioritize the selection of BMPs to remove storm water pollutants, reduce storm water runoff volume, and beneficially use storm water to support an integrated approach to protecting water quality and managing water resources in the following order of preference:
 - (a) On-site infiltration, bioretention and/or rainfall harvest and use.
 - (b) On-site biofiltration, off-site ground water replenishment, and/or off-site retrofit.

b. Applicability

i. New Development Projects

- (1) Development projects subject to Permittee conditioning and approval for the design and implementation of post-construction controls to mitigate storm water pollution, prior to completion of the project(s), are:

²⁸ Treatment BMPs when designed to drain within 96 hours of the end of rainfall minimize the potential for the breeding of vectors. See DPH Best Management Practices for Mosquito Control in California Manual at <http://sgvmosquito.org/downloads/NPDES/BMP%20for%20Mosquito%20Control%2008-10.pdf>

- (a) All development projects equal to 1 acre or greater of disturbed area and adding more than 10,000 square feet of impervious surface area
- (b) Industrial parks 10,000 square feet or more of surface area
- (c) Commercial strip-malls 10,000 square feet or more surface area
- (d) Retail gasoline outlets 5,000 square feet or more of surface area
- (e) Restaurants (SIC 5812) 5,000 square feet or more of surface area
- (f) Parking lots 5,000 square feet or more of impervious surface area, or with 25 or more parking spaces
- (g) Street and road construction of 10,000 square feet or more of impervious surface area shall follow USEPA guidance regarding Managing Wet Weather with Green Infrastructure: Green Streets²⁹ (December 2008 EPA-833-F-08-009) to the maximum extent practicable. Street and road construction applies to standalone streets, roads, highways, and freeway projects, and also applies to streets within larger projects.
- (h) Automotive service facilities (SIC 5013, 5014, 5511, 5541, 7532-7534 and 7536-7539) 5,000 square feet or more of surface area
- (i) Redevelopment projects in subject categories that meet Redevelopment thresholds identified in Part VI.D.6.b.ii (Redevelopment Projects) below
- (j) Projects located in or directly adjacent to, or discharging directly to a Significant Ecological Area (SEA), where the development will:
 - (i) Discharge storm water runoff that is likely to impact a sensitive biological species or habitat; and
 - (ii) Create 2,500 square feet or more of impervious surface area
- (k) Single-family hillside homes. To the extent that a Permittee may lawfully impose conditions, mitigation measures or other requirements on the development or construction of a single-family home in a hillside area as defined in the applicable Permittee's Code and Ordinances, each Permittee shall require that during the construction of a single-family hillside home, the following measures are implemented:
 - (i) Conserve natural areas
 - (ii) Protect slopes and channels
 - (iii) Provide storm drain system stenciling and signage
 - (iv) Divert roof runoff to vegetated areas before discharge unless the diversion would result in slope instability
 - (v) Direct surface flow to vegetated areas before discharge unless the diversion would result in slope instability.

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²⁹ <http://water.epa.gov/infrastructure/greeninfrastructure/index.cfm>

ii. Redevelopment Projects

(1) Redevelopment projects subject to Permittee conditioning and approval for the design and implementation of post-construction controls to mitigate storm water pollution, prior to completion of the project(s), are:

(a) Land-disturbing activity that results in the creation or addition or replacement of 5,000 square feet or more of impervious surface area on an already developed site on development categories identified in Part VI.D.6.c. (New Development/Redevelopment Performance Criteria).

(b) Where Redevelopment results in an alteration to more than fifty percent of impervious surfaces of a previously existing development, and the existing development was not subject to post-construction storm water quality control requirements, the entire project must be mitigated.

(c) Where Redevelopment results in an alteration of less than fifty percent of impervious surfaces of a previously existing development, and the existing development was not subject to post-construction storm water quality control requirements, only the alteration must be mitigated, and not the entire development.

(i) Redevelopment does not include routine maintenance activities that are conducted to maintain original line and grade, hydraulic capacity, original purpose of facility or emergency redevelopment activity required to protect public health and safety. Impervious surface replacement, such as the reconstruction of parking lots and roadways which does not disturb additional area and maintains the original grade and alignment, is considered a routine maintenance activity. Redevelopment does not include the repaving of existing roads to maintain original line and grade.

(ii) Existing single-family dwelling and accessory structures are exempt from the Redevelopment requirements unless such projects create, add, or replace 10,000 square feet of impervious surface area.

(d) In this section, Existing Development or Redevelopment projects shall mean ~~projects~~ all discretionary permit projects or project phases that have not been deemed complete for processing, or discretionary permit projects without vesting tentative maps that have not requested and received an extension of previously granted approvals within 90 days of adoption of the Order. Projects that have been deemed complete within 90 days of adoption of the Order are not subject to the requirements Section 7.b. For Permittee's projects the effective date shall be the date the governing body or their designee approves initiation of the project design. ~~that have been constructed or for which grading or land disturbance permits have been submitted~~

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~~and are deemed complete prior to the adoption date of this Order, except as otherwise specified in this Order.~~

(e) Specifically, the Newhall Ranch Project Phases I and II (a.k.a. the Landmark and Mission Village projects) are deemed to be an existing development that will at a minimum, be designed to comply with the Specific LID Performance Standards attached to the Waste Discharge Requirements (Order No. R4-2012-XXXX). All subsequent phases of the Newhall Ranch Project constructed during the term of this Order shall be subject to the requirements of this Order.

c. New Development/ Redevelopment Project Performance Criteria

(1) Integrated Water Quality/Flow Reduction/Resources Management Criteria

(1) Each Permittee shall require all New Development and Redevelopment projects (referred to hereinafter as “new projects”) identified in Part VI.D.67.b to control pollutants, pollutant loads, and runoff volume emanating from the project site by: (1) minimizing the impervious surface area and (2) controlling runoff from impervious surfaces through infiltration, bioretention and/or rainfall harvest and use.

(2) Except as provided in Part VI.D.67.c.ii. (Technical Infeasibility or Opportunity for Regional Ground Water Replenishment), Part VI.D.67.d.i (Local Ordinance Equivalence), or Part VI.D.67.c.v (Hydromodification), below, each Permittee shall require the project to retain on-site the Stormwater Quality Design Volume (SWQDv) defined as the runoff from:

- (a) The 0.75-inch, 24-hour rain event or
- (b) The 85th percentile, 24-hour rain event, as determined from the Los Angeles County 85th percentile precipitation isohyetal map, *whichever is greater.*

(3) Bioretention and biofiltration systems shall meet the design specifications provided in Attachment H to this Order unless otherwise approved by the Regional Water Board Executive Officer.

(4) When evaluating the potential for on-site retention, each Permittee shall consider the maximum potential for evapotranspiration from green roofs and rainfall harvest and use.

(2) Alternative Compliance for Technical Infeasibility or Opportunity for Regional Ground Water Replenishment

(1) In instances of technical infeasibility or where a project has been determined to provide an opportunity to replenish regional ground water supplies at an offsite location, each Permittee may allow projects to comply with this Order through the alternative compliance measures as described in Part VI.D.67.c.iii.

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(2) To demonstrate technical infeasibility, the project applicant must demonstrate that the project cannot reliably retain 100 percent of the SWQDv on-site, even with the maximum application of green roofs and rainwater harvest and use, and that compliance with the applicable post-construction requirements would be technically infeasible by submitting a site-specific hydrologic and/or design analysis conducted and endorsed by a registered professional engineer, geologist, architect, and/or landscape architect. Technical infeasibility may result from conditions including the following:

- (a) The infiltration rate of saturated in-situ soils is less than 0.45-3 inch per hour and it is not technically feasible to amend the in-situ soils to attain an infiltration rate necessary to achieve reliable performance of infiltration or bioretention BMPs in retaining the SWQDv on-site.
- (b) Locations where seasonal high ground water is within 5 to 10 feet of the surface,
- (c) Locations within 100 feet of a ground water well used for drinking water,
- (d) Brownfield development sites,
- (e) Other locations where pollutant mobilization is a documented concern,
- (f) Locations with potential geotechnical hazards, or
- (g) Smart growth and infill or redevelopment locations where the density and/ or nature of the project would create significant difficulty for compliance with the on-site volume retention requirement.

(3) To utilize alternative compliance measures to replenish ground water at an offsite location, the project applicant shall demonstrate why it is not advantageous to replenish ground water at the project site, and that the alternative measures shall also provide equal or greater water quality benefits to the receiving surface water than the Water Quality/Flow Reduction/Resource Management Criteria in Part VI.67.D.c.i.

(3) Alternative Compliance Measures

When a Permittee determines a project applicant has demonstrated that it is technically infeasible to retain 100 percent of the SWQDv on-site, or is proposing an alternative offsite project to replenish regional ground water supplies, the Permittee shall require one of the following mitigation options:

(1) On-site Biofiltration

- (a) If using biofiltration due to demonstrated technical infeasibility, then the new project must biofiltrate 1.5 times the portion of the SWQDv that is not reliably retained on-site, as calculated by Equation 1 below.

Equation 1:

$$B_v = 1.5 * [SWQD_v - R_v]$$

Where:

B_v = biofiltration volume

SWQD_v = the storm water runoff from a 0.75 inch, 24-hour storm or the 85th percentile storm, *whichever is greater*.

R_v = volume reliably retained on-site

(b) Conditions for On-site Biofiltration

- (i) Biofiltration systems shall meet the design specifications provided in Attachment H to this Order unless otherwise approved by the Regional Water Board Executive Officer.
- (ii) Biofiltration systems discharging to a receiving water that is included on the Clean Water Act section 303(d) list of impaired water quality-limited water bodies due to nitrogen compounds or related effects shall be designed and maintained to achieve enhanced nitrogen removal capability. See Attachment ~~I~~H for design criteria for underdrain placement to achieve enhanced nitrogen removal.

(2) Offsite Infiltration/~~Ground Water Replenishment/Bioretenion~~ Projects

- (a) Use infiltration, ~~ground water replenishment~~, or bioretention BMPs to intercept a volume of storm water runoff equal to the SWQD_v, less the volume of storm water runoff reliably retained on-site, at an approved offsite project, and
- (b) Provide pollutant reduction (treatment) of the storm water runoff discharged from the project site in accordance with the Water Quality Mitigation Criteria provided in Part VI.D.67.c.iv.
- (c) The required offsite mitigation volume shall be calculated by Equation 2 below and equal to:

Equation 2:

$$M_v = 1.0 * [SWQD_v - R_v]$$

Where:

M_v = mitigation volume

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SWQDv = runoff from the 0.75 inch, 24-hour storm event or the 85th percentile storm, *whichever is greater*

Rv = the volume of storm water runoff reliably retained on-site.

(3) Ground Water Replenishment Projects

Permittees may propose, in their Watershed Management Program or enhanced Watershed Management Program, regional projects to replenish regional ground water supplies at offsite locations, provided the groundwater supply has a designated beneficial use in the Basin Plan.

- (a) Regional groundwater replenishment projects must use infiltration, ground water replenishment, or bioretention BMPs to intercept a volume of storm water runoff equal to the SWQDv for new development and redevelopment projects, subject to Permittee conditioning and approval for the design and implementation of post-construction controls, within the approved project area, and
- (b) Provide pollutant reduction (treatment) of the storm water runoff discharged from development projects, within the project area, subject to Permittee conditioning and approval for the design and implementation of post-construction controls to mitigate storm water pollution in accordance with the Water Quality Mitigation Criteria provided in Part VI.D.7.c.iv.
- (c) Permittees implementing a regional ground water replenishment project in lieu of onsite controls shall ensure the volume of runoff captured by the project shall be equal to:

Equation 2:

$$\underline{Mv = 1.0 \cdot [SWQDv - Rv]}$$

Where:

Mv = mitigation volume

SWQDv = runoff from the 0.75 inch, 24-hour storm event or the 85th percentile storm, whichever is greater

Rv = the volume of storm water runoff reliably retained on-site.

- (d) Regional groundwater replenishment projects shall be located in the same sub-watershed (defined as draining to the same HUC-12 hydrologic area in the Basin Plan) as the new development or redevelopment projects which did not implement on site retention BMPs . Each Permittee may consider locations outside of the HUC-12 but within the HUC-10 subwatershed area if there are no opportunities within the HUC-12 subwatershed or if greater pollutant reductions and/or ground water replenishment can be achieved at a location

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within the expanded HUC-10 subwatershed. The use of a mitigation, ground water replenishment, or retrofit project outside of the HUC-12 subwatershed is subject to the approval of the Executive Officer of the Regional Water Board.

~~(3)~~(4) Offsite Project - Retrofit Existing Development

Use infiltration, bioretention, rainfall harvest and use and/or biofiltration BMPs to retrofit an existing development, with similar land uses as the new development or land uses associated with comparable or higher storm water runoff event mean concentrations (EMCs) than the new development. Comparison of EMCs for different land uses shall be based on published data from studies performed in southern California. The retrofit plan shall be designed and constructed to:

- (a) Intercept a volume of storm water runoff equal to the mitigation volume (Mv) as described above in Equation 2, except biofiltration BMPs shall be designed to meet the biofiltration volume as described in Equation 1 and
- (b) Provide pollutant reduction (treatment) of the storm water runoff from the project site as described in the Water Quality Mitigation Criteria provided in Part VI.D.67.c.iv.

~~(4)~~(5) Conditions for Offsite Projects

- (a) Project applicants seeking to utilize these alternative compliance provisions may propose other offsite projects, which the Permittees may approve if they meet the requirements of this subpart.
- (b) Location of offsite projects. Offsite projects shall be located in the same sub-watershed (defined as draining to the same HUC-12 hydrologic area in the Basin Plan) as the new development or redevelopment project. Each Permittee may consider locations outside of the HUC-12 but within the HUC-10 subwatershed area if there are no opportunities within the HUC-12 subwatershed or if greater pollutant reductions and/or ground water replenishment can be achieved at a location within the expanded HUC-10 subwatershed. The use of a mitigation, ground water replenishment, or retrofit project outside of the HUC-12 subwatershed is subject to the approval of the Executive Officer of the Regional Water Board.
- (c) Project applicant must demonstrate that equal benefits to ground water recharge cannot be met on the project site.
- (d) Each Permittee shall develop a prioritized list of offsite mitigation, ground water replenishment and/or retrofit projects, and when feasible, the mitigation must be directed to the highest priority project within the same HUC-12 or if approved by the Regional Water Board Executive Officer, the HUC-10 drainage area, as the new development project.

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- (e) Infiltration/bioretenion shall be the preferred LID BMP for offsite mitigation or ground water replenishment projects. Offsite retrofit projects may include green streets, parking lot retrofits, green roofs, and rainfall harvest and use. Biofiltration BMPs may be considered for retrofit projects when infiltration, bioretention or rainfall harvest and use is technically infeasible.
- (f) Each Permittee shall develop a schedule for the completion of offsite projects, including milestone dates to identify, fund, design, and construct the projects. Offsite projects shall be completed as soon as possible, and at the latest, within 4 years of the certificate of occupancy for the first project that contributed funds toward the construction of the offsite project, unless a longer period is otherwise authorized by the Executive Officer of the Regional Water Board. For public offsite projects, each Permittee must provide in their annual reports a summary of total offsite project funds raised to date and a description (including location, general design concept, volume of water expected to be retained, and total estimated budget) of all pending public offsite projects. Funding sufficient to address the offsite volume must be transferred to the Permittee (for public offsite mitigation projects) or to an escrow account (for private offsite mitigation projects) within one year of the initiation of construction.
- (g) Offsite projects must be approved by the Permittee and may be subject to approval by the Regional Water Board Executive Officer, if a third-party petitions the Executive Officer to review the project.
- (h) The project applicant must perform the offsite projects as approved by either the Permittee or the Regional Water Board Executive Officer or provide sufficient funding for public or private offsite projects to achieve the equivalent mitigation storm water volume.

(6) Regional Storm Water Mitigation Program

A Permittee or Permittee group may apply to the Regional Board for approval of a regional or sub-regional storm water mitigation program to substitute in part or wholly for New and Redevelopment requirements. Upon review and a determination by the Regional Board Executive Officer that the proposal is technically valid and appropriate, the Regional Board may consider for approval such a program if its implementation will:

- (a) Result in improved storm water quality;
(b) Protect stream habitat;
(c) Promote cooperative problem solving by diverse interests;
(d) Be fiscally sustainable and has secure funding; and
(e) Be completed in five years including the construction and start-up of treatment facilities.

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(f) Nothing in this provision shall be construed as to delay the implementation of requirements for new and redevelopment, as approved in this Order.

(h)
(4)(7) Water Quality Mitigation Criteria

(1) Each Permittee shall require all New Development and Redevelopment projects that have been approved for offsite mitigation or ground water replenishment projects as defined in Part VI.D.67.c.ii-iii to also provide treatment of storm water runoff from the project site. Each Permittee shall require these projects to design and implement post-construction storm water BMPs and control measures to reduce pollutant loading as necessary to:

- (a) Meet the pollutant specific benchmarks listed in Table 11 at the treatment systems outlet or prior to the discharge to the MS4, and
- (b) Ensure that the discharge does not cause or contribute to an exceedance of water quality standards at the Permittee's downstream MS4 outfall.

(2) Each Permittee may allow the project proponent to install flow-through modular treatment systems including sand filters, or other proprietary BMP treatment systems including planter boxes, with a demonstrated efficiency at least equivalent to a sand filter. The sizing of the flow through treatment device shall be based on a rainfall intensity of:

- (a) 0.2 inches per hour, or
- (b) The one year, one-hour rainfall intensity as determined from the most recent Los Angeles County isohyetal map, *whichever is greater*.

Table 11. Benchmarks Applicable to New Development Treatment BMPs³⁰

Conventional Pollutants

Pollutant	Suspended Solids mg/L	Total P mg/L	Total N mg/L	Total Nitrate mg/L	TKN mg/L	TOC mg/L
Effluent Concentration	4014	0.4013	1.0928	0.23	1.0409	43

Metals

³⁰ The treatment control BMP performance standards were developed from the median effluent water quality values of the ~~three~~ six highest performing BMPs, per pollutant, in the storm water BMP database (<http://www.bmpdatabase.org/>, last visited ~~May 15~~ September 25, 2012).

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Pollutant	Total Cd µg/L	Total Cu µg/L	Total Cr µg/L	Total Pb µg/L	Total Zn µg/L
Effluent Concentration	0.3	<u>76</u>	<u>2.68</u>	<u>2.05</u>	<u>4823</u>

(3) In addition to the requirements for controlling pollutant discharges as described in Part VI.D.67.iv. and the treatment requirements described above, each Permittee shall ensure that the new development or redevelopment will not cause or contribute to an exceedance of applicable water quality-based effluent limitations established in Part VI.E pursuant to Total Maximum Daily Loads (TMDLs).

~~(5)~~(8) Hydromodification (Flow/ Volume/ Duration) Control Criteria

(1) Each Permittee shall require all New Development and Redevelopment projects located within natural drainage systems as described in Part VI.D.67.v.(1)(a)(iii) to implement hydrologic control measures, to prevent accelerated downstream erosion and to protect stream habitat in natural drainage systems. The purpose of the hydrologic controls is to minimize changes in post-development hydrologic storm water runoff discharge rates, velocities, and duration. This shall be achieved by maintaining the project's pre-project storm water runoff flow rates and durations.

(a) Description

- (i) Hydromodification control in natural drainage systems shall be achieved by maintaining the Erosion Potential (Ep) in streams at a value of 1, unless an alternative value can be shown to be protective of the natural drainage systems from erosion, incision, and sedimentation that can occur as a result of flow increases from impervious surfaces and prevent damage to stream habitat in natural drainage system tributaries (see Attachment J - Determination of Erosion Potential).
- (ii) Hydromodification control may include one, or a combination of on-site, regional or sub-regional hydromodification control BMPs, LID strategies, or stream and riparian buffer restoration measures. Any in-stream restoration measure shall not adversely affect the beneficial uses of the natural drainage systems.
- (iii) Natural drainage systems that are subject to the hydromodification assessments and controls as described in this Part of the Order, include all drainages that have not been improved (e.g., channelized or armored with concrete, shotcrete, or rip-rap) or drainage systems that are tributary to a natural drainage system, except as provided in Part VI.D.67.v.(1)(b)--Exemptions to Hydromodification Controls [see below]. The clearing or dredging of a natural drainage system does not constitute an "improvement."

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(iv) Until the State Water Board or the Regional Water Board adopts a final Hydromodification Policy or criteria, Permittees shall implement the ~~Interim~~ Hydromodification Control Criteria described in Part VI.D.67.v.(1)(c) to control the potential adverse impacts of changes in hydrology that may result from new development and redevelopment projects located within natural drainage systems as described in Part VI.D.67.v.(1)(a)(iii).

(b) Exemptions to Hydromodification Controls. Permittees may exempt the following New Development and Redevelopment projects from implementation of hydromodification controls where assessments of downstream channel conditions and proposed discharge hydrology indicate that adverse hydromodification effects to ~~present and future~~ beneficial uses of Natural Drainage Systems are unlikely:

(i) Projects that are replacement, maintenance or repair of a Permittee’s existing flood control facility, storm drain, or transportation network.

(ii) Redevelopment Projects in the Urban Core that do not increase the effective impervious area or decrease the infiltration capacity of pervious areas compared to the pre-project conditions.

(iii) Projects that have any increased discharge directly or via a storm drain to a sump, lake, area under tidal influence, into a waterway that has a 100-year peak flow (Q100) of 25,000 cfs or more, or other receiving water that is not susceptible to hydromodification impacts.

(iv) Projects that discharge directly or via a storm drain into concrete or otherwise engineered (not natural) channels (e.g., channelized or armored with rip rap, shotcrete, etc.), which, in turn, discharge into receiving water that is not susceptible to hydromodification impacts (as in Parts VI.D.67.v.(1)(b)(i)-(iii) above).

—LID BMPs implemented on single family homes are sufficient to comply with Hydromodification criteria.

~~(iv)~~(v)

(c) ~~Interim~~—Hydromodification Control Criteria. The ~~Interim~~ Hydromodification Control Criteria to protect natural drainage systems until the State or Regional Water Board adopts a final Hydromodification Policy or criteria are as follows:

(i) Except as provided for in Part VI.D.67.v.(1)(b), projects disturbing an area greater than 1 acre but less than 50 acres within natural drainage systems will be presumed to meet pre-development hydrology if one of the following demonstrations is made:

1. The project is designed to retain on-site, through infiltration, evapotranspiration, and/or harvest and use, the storm water volume from the runoff of the 95th percentile, 24-hour storm, or
 2. The runoff flow rate, volume, velocity, and duration for the post-development condition do not exceed the pre-development condition for the 2-year, 24-hour rainfall event. This condition may be substantiated by simple screening models, including those described in *Hydromodification Effects on Flow Peaks and Durations in Southern California Urbanizing Watersheds* (Hawley et al., 2011) or other models acceptable to the Executive Officer of the Regional Water Board, or
 3. The Erosion Potential (Ep) in the receiving water channel will approximate 1, as determined by a Hydromodification Analysis Study and the equation presented in Attachment J. Alternatively, Permittees can opt to use other work equations to calculate Erosion Potential with Executive Officer approval.
- (ii) Projects disturbing 50 acres or more within natural drainage systems will be presumed to meet pre-development hydrology based on the successful demonstration of one of the following conditions:
1. The site infiltrates on-site at least the runoff from a 2-year, 24-hour storm event, or
 2. The runoff flow rate, volume, velocity, and duration for the post-development condition does not exceed the pre-development condition for the 2-year, 24-hour rainfall events. These conditions must be substantiated by hydrologic modeling acceptable to the Regional Water Board Executive Officer, or
 3. The Erosion Potential (Ep) in the receiving water channel will approximate 1, as determined by a Hydromodification Analysis Study and the equation presented in Attachment J.

~~(d)~~(c) Final Alternative Hydromodification Criteria

(i) Permittees may satisfy the requirement for Hydromodification Controls by implementing the hydromodification requirements in the County of Los Angeles Low Impact Development Manual (2009) for all projects disturbing an area greater than 1 acre within natural drainage systems.

~~(i)~~(ii) Each Permittee may alternatively shall develop and implement watershed specific Hydromodification Control Plans (HCPs). Such plans shall be developed no later than 180 days one year after the

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~~State Water Board issues final a Hydromodification Policy or criteria~~ the effective date of this Order.

~~(ii)~~(iii) The HCP shall identify:

1. Stream classifications
2. Flow rate and duration control methods
3. Sub-watershed mitigation strategies
4. Stream and/or riparian buffer restoration measures, which will maintain the stream and tributary Erosion Potential at 1 unless an alternative value can be shown to be protective of the natural drainage systems from erosion, incision, and sedimentation that can occur as a result of flow increases from impervious surfaces and prevent damage to stream habitat in natural drainage system tributaries.

~~(iii)~~(iv) The HCP shall contain the following elements:

1. Hydromodification Management Standards
2. Natural Drainage Areas and Hydromodification Management Control Areas
3. New Development and Redevelopment Projects subject to the HCP
4. Description of authorized Hydromodification Management Control BMPs
5. Hydromodification Management Control BMP Design Criteria
6. For flow duration control methods, the range of flows to control for, and goodness of fit criteria
7. Allowable low critical flow, Q_c , which initiates sediment transport
8. Description of the approved Hydromodification Model
9. Any alternate Hydromodification Management Model and Design
10. Stream Restoration Measures Design Criteria
11. Monitoring and Effectiveness Assessment
12. Record Keeping
13. The HCP shall be deemed in effect upon Executive Officer approval.

~~(6)~~(9) Watershed Equivalence.

Regardless of the methods through which Permittees allow project applicants to implement alternative compliance measures, the subwatershed-wide

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(defined as draining to the same HUC-12 hydrologic area in the Basin Plan) result of all development must be at least the same level of water quality protection as would have been achieved if all projects utilizing these alternative compliance provisions had complied with Part VI.D.67.c.i (Integrated Water Quality/Flow Reduction/Resource Management Criteria).

~~(7)~~(10) Annual Report

Each Permittee shall provide in their annual report to the Regional Water Board a list of mitigation project descriptions and estimated pollutant and flow reduction analyses (compiled from design specifications submitted by project applicants and approved by the Permittee(s)). Within 4 years of Order adoption, Permittees must submit in their Annual Report, a comparison of the expected aggregate results of alternative compliance projects to the results that would otherwise have been achieved by retaining on site the SWQDv.

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d. Implementation

i. Local Ordinance Equivalence

A Permittee that has adopted a local LID ordinance prior to the adoption of this Order, and which includes a retention requirement numerically equal to the 0.75-inch, 24-hour rain event or the 85th percentile, 24-hour rain event, whichever is greater, may submit documentation to the Regional Water Board that the alternative requirements in the local ordinance will provide equal or greater reduction in storm water discharge pollutant loading and volume as would have been obtained through strict conformance with Part VI.D.67.c.i. (Integrated Water Quality/Flow Reduction Resources Management Criteria) or Part VI.D.67.c.ii. (Alternative Compliance —Measures for Technical Infeasibility or Opportunity for Regional -Ground water Replenishment) of this Order and, if applicable, Part VI.D.67.c.v. (Hydromodification (Flow/Volume Duration) Control Criteria).

(1) Documentation shall be submitted within 180 days after the effective date of this Order.

(2) The Regional Board shall provide public notice of the proposed equivalency determination and a minimum 30-day period for public comment. After review and consideration of public comments, The the Regional Water Board Executive Officer will determine whether implementation of the local ordinance provides equivalent pollutant control to the applicable provisions of this Order. Local ordinances that do not strictly conform to the provisions of this Order must be approved by the Regional Water Board Executive Officer as being “equivalent” in effect to the applicable provisions of this Order in order to substitute for the requirements in Parts VI.D.67.c.i and, where applicable, VI.D.76.c.v.

(3) Where the Regional Water Board Executive Officer determines that a Permittee’s local LID ordinance does not provide equivalent pollutant control, the Permittee shall either

(a) Require conformance with Parts VI.D.67.c.i and, where applicable, VI.D.67.c.v, or

(b) Update its local ordinance to conform to the requirements herein within two years of the effective date of this Order.

ii. Project Coordination

(1) Each Permittee shall facilitate a process for effective approval of post-construction storm water control measures. The process shall include:

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- (a) Detailed LID site design and BMP review including BMP sizing calculations, BMP pollutant removal performance, and municipal approval; and
- (b) An established structure for communication and delineated authority between and among municipal departments that have jurisdiction over project review, plan approval, and project construction through memoranda of understanding or an equivalent agreement.

iii. Maintenance Agreement and Transfer

- (1) Prior to issuing approval for final occupancy, each Permittee shall require that all new development and redevelopment projects subject to post-construction BMP requirements, with the exception of simple LID BMPs implemented on single family residences, provide an operation and maintenance plan, monitoring plan, where required, and verification of ongoing maintenance provisions for LID practices, Treatment Control BMPs, and Hydromodification Control BMPs including but not limited to: final map conditions, legal agreements, covenants, conditions or restrictions, CEQA mitigation requirements, conditional use permits, and/or other legally binding maintenance agreements. Permittees shall require maintenance records be kept on site for treatment BMPs implemented on single family residences.
 - (a) Verification at a minimum shall include the developer's signed statement accepting responsibility for maintenance until the responsibility is legally transferred; and either:
 - (i) A signed statement from the public entity assuming responsibility for BMP maintenance; or
 - (ii) Written conditions in the sales or lease agreement, which require the property owner or tenant to assume responsibility for BMP maintenance and conduct a maintenance inspection at least once a year; or
 - (iii) Written text in project covenants, conditions, and restrictions (CCRs) for residential properties assigning BMP maintenance responsibilities to the Home Owners Association; or
 - (iv) Any other legally enforceable agreement or mechanism that assigns responsibility for the maintenance of BMPs.
 - (b) Each Permittee shall require all development projects subject to post-construction BMP requirements to provide a plan for the operation and maintenance of all structural and treatment controls. The plan shall be submitted for examination of relevance to keeping the BMPs in proper working order. Where BMPs are transferred to Permittee for ownership and maintenance, the plan shall also include all relevant costs for upkeep of BMPs in the transfer. Operation and Maintenance plans for

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private BMPs shall be kept on-site for periodic review by Permittee inspectors.

iv. Tracking, Inspection, and Enforcement of Post-Construction BMPs

- (1) Each Permittee shall implement a tracking system and an inspection and enforcement program for new development and redevelopment post-construction storm water no later than 60 days after Order adoption date.
 - (a) Implement a GIS or other electronic system for tracking projects that have been conditioned for post-construction BMPs. The electronic system, at a minimum, should contain the following information:
 - (i) Municipal Project ID
 - (ii) State WDID No.
 - (iii) Project Acreage
 - (iv) BMP Type and Description
 - (v) BMP Location (coordinates)
 - (vi) Date of Acceptance
 - (vii) Date of Maintenance Agreement
 - (viii) Maintenance Records
 - (ix) Inspection Date and Summary
 - (x) Corrective Action
 - (xi) Date Certificate of Occupancy Issued
 - (xii) Replacement or Repair Date
 - (b) Inspect all development sites upon completion of construction and prior to the issuance of occupancy certificates to ensure proper installation of LID measures, structural BMPs, treatment control BMPs and hydromodification control BMPs. The inspection may be combined with other inspections provided it is conducted by trained personnel.
 - (c) Verify proper maintenance and operation of post-construction BMPs previously approved for new development and redevelopment and operated by the Permittee. The post-construction BMP maintenance inspection program shall incorporate the following elements:
 - (i) The development of a Post-construction BMP Maintenance Inspection checklist

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- (ii) Inspection at least once every 2 years after project completion, of post-construction BMPs to assess operation conditions with particular attention to criteria and procedures for post-construction treatment control and hydromodification control BMP repair, replacement, or re-vegetation.
- (d) For post-construction BMPs operated and maintained by parties other than the Permittee, the Permittee shall require ~~annual reports by the other parties to demonstrating document~~ proper maintenance and operations.
- (e) Undertake enforcement action per the established Progressive Enforcement Policy as appropriate based on the results of the inspection. See Part VI.D.2 for requirements for the development and implementation of a Progressive Enforcement Policy.

7.8. Development Construction Program

- a. Each Permittee shall develop, implement, and enforce a construction program that:
 - i. Prevents illicit construction-related discharges of pollutants into the MS4 and receiving waters.
 - ii. Implements and maintains structural and non-structural BMPs to reduce pollutants in storm water runoff from construction sites.
 - iii. Reduces construction site discharges of pollutants to the MS4 to the MEP.
 - iv. Prevents construction site discharges to the MS4 from causing or contributing to a violation of water quality standards.
- b. Each Permittee shall establish for its jurisdiction an enforceable erosion and sediment control ordinance for all construction sites that disturb soil.

b.

c. Applicability

The provisions contained in Part VI.D.78.d below apply exclusively to construction sites less than 1 acre. Provisions contained in Part VI.D.78.e – j, apply exclusively to construction sites 1 acre or greater. The requirements contained in this part apply to all activities involving soil disturbance with the exception of agricultural activities. Activities covered by this permit include but are not limited to grading, vegetation clearing, soil compaction, paving, re-paving and linear underground/overhead projects (LUPs).

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d. Requirements for Construction Sites Less than One Acre

i. For construction sites less than 1 acre, each Permittee shall:

- (1) Through the use of the Permittee’s erosion and sediment control ordinance or and/or building permit, require the implementation of an effective combination of erosion and sediment control BMPs from Table 12 to prevent erosion and sediment loss, and the discharge of construction wastes.

Table 12. ~~Minimum~~ Applicable Set of BMPs for All Construction Sites

Erosion Controls	Scheduling
	Preservation of Existing Vegetation
Sediment Controls	Silt Fence
	Sand Bag Barrier
	Stabilized Construction Site Entrance/Exit
Non-Storm Water Management	Water Conservation Practices
	Dewatering Operations
Waste Management	Material Delivery and Storage
	Stockpile Management
	Spill Prevention and Control
	Solid Waste Management
	Concrete Waste Management
	Sanitary/Septic Waste Management

- (2) Possess the ability to identify all construction sites with soil disturbing activities that require a permit, regardless of size, and shall be able to provide a list of permitted sites upon request of the Regional Water Board. Permittees may use existing permit databases or other tracking systems to comply with these requirements.
- (3) Inspect construction sites on as needed based on the evaluation of the factors that are a threat to water quality. In evaluating the threat to water quality, the following factors shall be considered: soil erosion potential; site slope; project size and type; sensitivity of receiving water bodies; proximity to receiving water bodies; non-storm water discharges; past record of non-compliance by the operators of the construction site; and any water quality issues relevant to the particular MS4.
- (4) Implement the Permittee’s Progressive Enforcement Policy to ensure that construction sites are brought into compliance with the erosion and sediment control ordinance within a reasonable time period. See Part VI.D.2 for requirements for the development and implementation of a Progressive Enforcement Policy.

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- e. Each Permittee shall require operators of public and private construction sites within its jurisdiction to select, install, implement, and maintain BMPs that comply with its erosion and sediment control ordinance.
- f. The requirements contained in this part apply to all activities involving soil disturbance with the exception of agricultural activities. Activities covered by this permit include but are not limited to grading, vegetation clearing, soil compaction, paving, re-paving and linear underground/overhead projects (LUPs).

g. Construction Site Inventory / Electronic Tracking System

- i. Each Permittee shall use an electronic system to inventory grading permits, encroachment permits, demolition permits, building permits, or construction permits (and any other municipal authorization to move soil and/ or construct or destruct that involves land disturbance) issued by the Permittee. To satisfy this requirement, the use of a database or GIS system is recommended.
- ii. Each Permittee shall complete an inventory and continuously update as new sites are permitted and sites are completed. The inventory / tracking system shall contain, at a minimum:
 - (1) Relevant contact information for each project (e.g., name, address, phone, email, etc. for the owner and contractor.
 - (2) The basic site information including location, status, size of the project and area of disturbance.
 - (3) The proximity all water bodies, water bodies listed as impaired by sediment-related pollutants, and water bodies for which a sediment-related TMDL has been adopted and approved by USEPA.
 - (4) Significant threat to water quality status, based on consideration of factors listed in Appendix 1 to the Statewide General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit).
 - (5) Current construction phase where feasible.
 - (6) The required inspection frequency.
 - (7) The project start date and anticipated completion date.
 - (8) Whether the project has submitted a Notice of Intent and obtained coverage under the Construction General Permit.
 - (9) The date the Permittee approved the Erosion and Sediment Control Plan (ESCP).
 - (10) Post-Construction Structural BMPs subject to Operation and Maintenance Requirements.

h. Construction Plan Review and Approval Procedures

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- i. Each Permittee shall develop procedures to review and approve relevant construction plan documents.
- ii. The review procedures shall be developed and implemented such that the following minimum requirements are met:
 - (1) Prior to issuing a grading or building permit, each Permittee shall require each operator of a construction activity within its jurisdiction to prepare and submit an ESCP prior to the disturbance of land for the Permittee's review and written approval. The construction site operator shall be prohibited from commencing construction activity prior to receipt of written approval by the Permittee. Each Permittee shall not approve any ESCP unless it contains appropriate site-specific construction site BMPs that meet the minimum requirements of a Permittee's erosion and sediment control ordinance.
 - (2) ESCPs must include the elements of a Storm Water Pollution Prevention Plan (SWPPP). SWPPPs prepared in accordance with the requirements of the Construction General Permit can be accepted as ESCPs.
 - (3) At a minimum, the ESCP must address the following elements:
 - (a) Methods to minimize the footprint of the disturbed area and to prevent soil compaction outside of the disturbed area.
 - (b) Methods used to protect native vegetation and trees.
 - (c) Sediment/Erosion Control.
 - (d) Controls to prevent tracking on and off the site.
 - (e) Non-storm water controls (e.g., vehicle washing, dewatering, etc.).
 - (f) Materials Management (delivery and storage).
 - (g) Spill Prevention and Control.
 - (h) Waste Management (e.g., concrete washout/waste management; sanitary waste management).
 - (i) Identification of site Risk Level as identified per the requirements in Appendix 1 of the Construction General Permit.
 - (4) The ESCP must include the rationale for the selection and design of the proposed BMPs, including quantifying the expected soil loss from different BMPs.
 - (5) Each Permittee shall require that the ESCP is developed and certified by a Qualified SWPPP Developer (QSD).
 - (6) Each Permittee shall require that all structural BMPs be designed by a licensed California Engineer.
 - (7) Each Permittee shall require that for all sites, the landowner or the landowner's agent sign a statement on the ESCP as follows:

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(a) "I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that submitting false and/ or inaccurate information, failing to update the ESCP to reflect current conditions, or failing to properly and/ or adequately implement the ESCP may result in revocation of grading and/ or other permits or other sanctions provided by law."

(8) Prior to issuing a grading or building permit, each Permittee must verify that the construction site operators have existing coverage under applicable permits, including, but not limited to the State Water Board's Construction General Permit, and State Water Board 401 Water Quality Certification, ~~U.S. Army Corp 404 permit, and California Department of Fish and Game 1600 Agreement.~~

(9) Each Permittee shall develop and implement a checklist to be used to conduct and document review of each ESCP.

i. BMP Implementation Level

i. Each Permittee shall implement technical standards for the selection, installation and maintenance of construction BMPs for all construction sites within its jurisdiction.

ii. The BMP technical standards shall require:

(1) The use of BMPs that are tailored to the risks posed by the project. Sites are to be ranked from Low Risk (Risk 1) to High Risk (Risk 3). Project risks are to be calculated based on the potential for erosion from the site and the sensitivity of the receiving water body. Receiving water bodies that are listed on the Clean Water Act (CWA) Section 303(d) list for sediment or siltation are considered High Risk. Likewise, water bodies with designated beneficial uses of SPWN, COLD, and MIGR are also considered to be High Risk. The combined (sediment/receiving water) site risk shall be calculated using the methods provided in Appendix 1 of the Construction General Permit. At a minimum, the BMP technical standards shall include requirements for High Risk sites as defined in Table 15.

(2) The use of BMPs for all construction sites, sites equal or greater to 1 acre, and for paving projects per Tables 14 and 16 of this Order.

(3) Detailed installation designs and cut sheets for use within ESCPs.

(4) Maintenance expectations for each BMP, or category of BMPs, as appropriate.

iii. Permittees are encouraged to adopt respective BMPs from latest versions of the *California BMP Handbook, Construction* or *Caltrans Stormwater Quality*

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Handbooks, Construction Site Best Management Practices (BMPs) Manual and addenda. Alternatively, Permittees are authorized to develop or adopt equivalent BMP standards consistent for Southern California and for the range of activities presented below in Tables 13 through 16.

- iv. The local BMP technical standards shall be readily available to the development community and shall be clearly referenced within each Permittee’s storm water or development services website, ordinance, permit approval process and/or ESCP review forms. The local BMP technical standards shall also be readily available to the Regional Water Board upon request.
- v. Local BMP technical standards shall be available for the following:

Table 13. Minimum Set of BMPs for All Construction Sites

Erosion Controls	Scheduling
	Preservation of Existing Vegetation
Sediment Controls	Silt Fence
	Sand Bag Barrier
	Stabilized Construction Site Entrance/Exit
Non-Storm Management	water Water Conservation Practices
	Dewatering Operations
Waste Management	Material Delivery and Storage
	Stockpile Management
	Spill Prevention and Control
	Solid Waste Management
	Concrete Waste Management
	Sanitary/Septic Waste Management

Table 14. Additional BMPs Applicable to Construction Sites Disturbing 1 Acre or More

Erosion Controls	Hydraulic Mulch
	Hydroseeding
	Soil Binders
	Straw Mulch
	Geotextiles and Mats
	Wood Mulching
Sediment Controls	Fiber Rolls
	Gravel Bag Berm
	Street Sweeping and/ or Vacuum
	Storm Drain Inlet Protection
	Scheduling
	Check Dam
Additional Controls	Wind Erosion Controls
	Stabilized Construction Entrance/ Exit
	Stabilized Construction Roadway

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	Entrance/ Exit Tire Wash
Non-Storm Management	water Vehicle and Equipment Washing
	Vehicle and Equipment Fueling
	Vehicle and Equipment Maintenance
Waste Management	Material Delivery and Storage
	Spill Prevention and Control

Table 15. Additional Enhanced BMPs for High Risk Sites

Erosion Controls	Hydraulic Mulch
	Hydroseeding
	Soil Binders
	Straw Mulch
	Geotextiles and Mats
	Wood Mulching
	Slope Drains
Sediment Controls	Silt Fence
	Fiber Rolls
	Sediment Basin
	Check Dam
	Gravel Bag Berm
	Street Sweeping and/or Vacuum
	Sand Bag Barrier
	Storm Drain Inlet Protection
Additional Controls	Wind Erosion Controls
	Stabilized Construction Entrance/Exit
	Stabilized Construction Roadway
	Entrance/Exit Tire Wash
	Advanced Treatment Systems*
Non-Storm water Management	Water Conservation Practices
	Dewatering Operations (Ground water dewatering only under NPDES Permit No. CAG994004)
	Vehicle and Equipment Washing
	Vehicle and Equipment Fueling
	Vehicle and Equipment Maintenance
Waste Management	Material Delivery and Storage
	Stockpile Management
	Spill Prevention and Control
	Solid Waste Management

* Applies to public roadway projects.

Table 16. Minimum Required BMPs for Roadway Paving or Repair Operation (For Private or Public Projects)

1.	Restrict paving and repaving activity to exclude periods of rainfall or
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	predicted rainfall unless required by emergency conditions.
2.	Install gravel bags and filter fabric or other equivalent inlet protection at all susceptible storm drain inlets and at manholes to prevent spills of paving products and tack coat.
3.	Prevent the discharge of release agents including soybean oil, other oils, or diesel to the storm water drainage system or receiving waters.
4.	Minimize non storm water runoff from water use for the roller and for evaporative cooling of the asphalt.
5.	Clean equipment over absorbent pads, drip pans, plastic sheeting or other material to capture all spillage and dispose of properly.
6.	Collect liquid waste in a container, with a secure lid, for transport to a maintenance facility to be reused, recycled or disposed of properly.
7.	Collect solid waste by vacuuming or sweeping and securing in an appropriate container for transport to a maintenance facility to be reused, recycled or disposed of properly.
8.	Cover the “cold-mix” asphalt (i.e., pre-mixed aggregate and asphalt binder) with protective sheeting during a rainstorm.
9.	Cover loads with tarp before haul-off to a storage site, and do not overload trucks.
10.	Minimize airborne dust by using water spray or other approved dust suppressant during grinding.
11.	Avoid stockpiling soil, sand, sediment, asphalt material and asphalt grindings materials or rubble in or near storm water drainage system or receiving waters.
12.	Protect stockpiles with a cover or sediment barriers during a rain.

j. Construction Site Inspection

- i. Each Permittee shall use its legal authority to implement procedures for inspecting public and private construction sites.
- ii. The inspection procedures shall be implemented as follows:
 - (1) Inspect the public and private construction sites as specified in Table 17 below:

Table 17. Inspection Frequencies for Sites One Acre or Greater

Site	Inspection Frequency Shall Occur
a. All sites 1 acre or larger that discharge to a tributary listed by the state as an impaired water for sediment or turbidity under the CWA § 303(d)	(1) when two or more consecutive days with greater than 50% chance of rainfall are predicted by NOAA ³¹ , (2) within 48 hours of a ½-inch rain

³¹ www.srh.noaa.gov/forecast

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b. Other sites 1 acre or more determined to be a significant threat to water quality ³²	event and at (3) least once every two weeks
c. All other construction sites with 1 acre or more of soil disturbance not meeting the criteria above	At least monthly

(2) Each Permittee shall inspect all phases of construction as follows:

(a) Prior to Land Disturbance

Prior to allowing an operator to commence land disturbance, each Permittee shall perform an inspection to ensure all necessary erosion and sediment structural and non-structural BMP materials and procedures are available per the erosion and sediment control plan.

(b) During Active Construction, including Land Development³³ and Vertical Construction³⁴

In accordance with the frequencies specified in Part VI.D.78.j and Table 17 of this Order, each Permittee shall perform an inspection to ensure all necessary erosion and sediment structural and non-structural BMP materials and procedures are available per the erosion and sediment control plan throughout the construction process.

(c) Final Landscaping / Site Stabilization³⁵

At the conclusion of the project and as a condition of approving and/or issuing a Certificate of Occupancy, each Permittee shall inspect the constructed site to ensure that all graded areas have reached final stabilization and that all trash, debris, and construction materials, and temporary erosion and sediment BMPs are removed.

(3) Based on the required frequencies above, each construction project shall be inspected a minimum of three times.

(4) Inspection Standard Operating Procedures

Each Permittee shall develop, implement, and revise as necessary, standard operating procedures that identify the inspection procedures each Permittee will follow. Inspections of construction sites, and the standard operating procedures, shall include, but are not limited to:

³² In evaluating the threat to water quality, the following factors shall be considered: soil erosion potential; site slope; project size and type; sensitivity of receiving water bodies; proximity to receiving water bodies; non-storm water discharges; past record of non-compliance by the operators of the construction site; and any water quality issues relevant to the particular MS4.

³³ Activities include cuts and fills, rough and finished grading; alluvium removals; canyon cleanouts; rock undercuts; keyway excavations; stockpiling of select material for capping operations; and excavation and street paving, lot grading, curbs, gutters and sidewalks, public utilities, public water facilities including fire hydrants, public sanitary sewer systems, storm sewer system and/or other drainage improvement.

³⁴ The build out of structures from foundations to roofing, including rough landscaping.

³⁵ All soil disturbing activities at each individual parcel within the site have been completed.

REVISITED TENTATIVE

- (a) Verification of active coverage under the Construction General Permit for sites disturbing 1 acre or more, or that are part of a planned development that will disturb 1 acre or more and a process for referring non-filers to the Regional Water Board.
- (b) Review of the applicable ESCP and inspection of the construction site to determine whether all BMPs have been selected, installed, implemented, and maintained according to the approved plan and subsequent approved revisions.
- (c) Assessment of the appropriateness of the planned and installed BMPs and their effectiveness.
- (d) Visual observation and record keeping of non-storm water discharges, potential illicit discharges and connections, and potential discharge of pollutants in storm water runoff.
- (e) Development of a written or electronic inspection report generated from an inspection checklist used in the field.
- (f) Tracking of the number of inspections for the inventoried construction sites throughout the reporting period to verify that the sites are inspected at the minimum frequencies required in Table 17 of this Order.

k. Enforcement

Each Permittee shall implement its Progressive Enforcement Policy to ensure that construction sites are brought into compliance with all storm water requirements within a reasonable time period. See Part VI.D.2 for requirements for the development and implementation of a Progressive Enforcement Policy.

l. Permittee Staff Training

- i. Each Permittee shall ensure that all staff whose primary job duties are related to implementing the construction storm water program are adequately trained.
- ii. Each Permittee may conduct in-house training or contract with consultants. Training shall be provided to the following staff positions of the MS4:

(1) Plan Reviewers and Permitting Staff

Ensure staff and consultants are trained as qualified individuals, knowledgeable in the technical review of local erosion and sediment control ordinance, local BMP technical standards, ESCP requirements, and the key objectives of the State Water Board QSD program. Permittees may provide internal training to staff or require staff to obtain QSD certification.

(2) Erosion Sediment Control/Storm Water Inspectors

Each Permittee shall ensure that its inspectors are knowledgeable in inspection procedures consistent with the State Water Board sponsored

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program QSD or a Qualified SWPPP Practitioner (QSP) or that a designated person on staff who has been trained in the key objectives of the QSD/QSP programs supervises inspection operations. Each Permittee may provide internal training to staff or require staff to obtain QSD/QSP certification. Each inspector must be knowledgeable of the local BMP technical standards and ESCP requirements.

(3) Third-Party Plan Reviewers, Permitting Staff, and Inspectors

If the Permittee utilizes outside parties to conduct inspections and/or review plans, each Permittee shall ensure these staff are trained per the requirements listed above. Outside contractors can self-certify, providing they certify they have received all applicable training required in the Permit and have documentation to that effect.

8.9. Public Agency Activities Program

a. Each Permittee shall implement a Public Agency Activities Program to minimize storm water pollution impacts from Permittee-owned or operated facilities and activities and to identify opportunities to reduce storm water pollution impacts from areas of existing development. Requirements for Public Agency Facilities and Activities consist of the following components:

- i. Public Construction Activities Management
- ii. Public Facility Inventory
- iii. Inventory of Existing Development for Retrofitting Opportunities
- iv. Public Facility and Activity Management
- v. Vehicle and Equipment Wash Areas
- vi. Landscape, Park, and Recreational Facilities Management
- vii. Storm Drain Operation and Maintenance
- viii. Streets, Roads, and Parking Facilities Maintenance
- ix. Emergency Procedures
- x. Municipal Employee and Contractor Training

b. Public Construction Activities Management

- i. Each Permittee shall implement and comply with the Planning and Land Development Program requirements in Part VI.D.6–7 of this Order at Permittee-owned or operated (i.e., public or Permittee sponsored) construction projects that are categorized under the project types identified in Part VI.D.67.b of this Order.
- ii. Each Permittee shall implement and comply with the appropriate Development Construction Program requirements in Part VI.D.7–8 of this Order at Permittee-owned or operated construction projects as applicable.

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- iii. For Permittee-owned or operated projects (including those under a capital improvement project plan) that disturb less than one acre of soil, each Permittee shall require an effective combination of erosion and sediment control BMPs from Table 13 (see Construction Development Program, minimum BMPs).
- iv. Each Permittee shall obtain separate coverage under the Construction General Permit for all Permittee-owned or operated construction sites that require coverage.
- c. Public Facility Inventory**
- i. Each Permittee shall maintain an updated inventory of all Permittee-owned or operated (i.e., public) facilities within its jurisdiction that are potential sources of storm water pollution. The incorporation of facility information into a GIS is recommended. Sources to be tracked include but are not limited to the following:
- (1) Animal control facilities
 - (2) Chemical storage facilities
 - (3) Composting facilities
 - (4) Equipment storage and maintenance facilities (including landscape maintenance-related operations)
 - (5) Fueling or fuel storage facilities (including municipal airports)
 - (6) Hazardous waste disposal facilities
 - (7) Hazardous waste handling and transfer facilities
 - (8) Incinerators
 - (9) Landfills
 - (10) Materials storage yards
 - (11) Pesticide storage facilities
 - (12) Fire stations
 - (13) Public restrooms
 - (14) Public parking lots
 - (15) Public golf courses
 - (16) Public swimming pools
 - (17) Public parks
 - (18) Public works yards
 - (19) Public marinas
 - (20) Recycling facilities
 - (21) Solid waste handling and transfer facilities

- (22) Vehicle storage and maintenance yards
 - (23) Storm water management facilities (e.g., detention basins)
 - (24) All other Permittee-owned or operated facilities or activities that each Permittee determines may contribute a substantial pollutant load to the MS4.
- ii. Each Permittee shall include the following minimum fields of information for each Permittee-owned or operated facility in its inventory.
 - (1) Name of facility
 - (2) Name of facility manager and contact information
 - (3) Address of facility (physical and mailing)
 - (4) A narrative description of activities performed and potential pollution sources.
 - (5) Coverage under the Industrial General Permit or other individual or general NPDES permits or any applicable waiver issued by the Regional or State Water Board pertaining to storm water discharges.
 - iii. Each Permittee shall update its inventory at least ~~twice~~ once during the 5-year term of the Order. The update shall be accomplished through collection of new information obtained through field activities or through other readily available inter and intra-agency informational databases (e.g., property management, land-use approvals, accounting and depreciation ledger account, and similar information).

d. Inventory of Existing Development for Retrofitting Opportunities

- i. Each Permittee shall develop an inventory of retrofitting opportunities that meets the requirements of this Part VI. ~~89.Dd~~. Retrofit opportunities shall be identified within the public right-of-way or in coordination with a TMDL implementation plan(s). The goals of the existing development retrofitting inventory are to address the impacts of existing development through regional or sub-regional retrofit projects that reduce the discharges of storm water pollutants into the MS4 and prevent discharges from the MS4 from causing or contributing to a violation of water quality standards as defined in Part V.A, Receiving Water Limitations.
- ii. Each Permittee shall screen existing areas of development to identify candidate areas for retrofitting using watershed models or other screening level tools.
- iii. Each Permittee shall evaluate and rank the areas of existing development identified in the screening to prioritize retrofitting candidates. Criteria for evaluation may include but are not limited to:
 - (1) Feasibility, including general private and public land availability;
 - (2) Cost effectiveness;

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- (3) Pollutant removal effectiveness;
 - (4) Tributary area potentially treated;
 - (5) Maintenance requirements;
 - (6) Landowner cooperation;
 - (7) Neighborhood acceptance;
 - (8) Aesthetic qualities;
 - (9) Efficacy at addressing concern; and
 - (10) Potential improvements to public health and safety.
- iv.** Each Permittee shall consider the results of the evaluation in the following programs:
- (1) The Permittee's storm water management program: Highly feasible projects expected to benefit water quality should be given a high priority to implement source control and treatment control BMPs in a Permittee's SQMP.
 - (2) Off-site mitigation for New Development and Redevelopment: Each Permittee shall consider high priority retrofit projects as candidates for off-site mitigation projects per Part VI.D.67.c.iii.(4).(d).
 - (3) Where feasible, at the discretion of the Permittee, the existing development retrofitting program may be coordinated with flood control projects and other infrastructure improvement programs per Part VI.D.89.e.ii.(2) below.
- v.** Each Permittee shall cooperate with private landowners to encourage site specific retrofitting projects. Each Permittee shall consider the following practices in cooperating with private landowners to retrofit existing development:
- (1) Demonstration retrofit projects;
 - (2) Retrofits on public land and easements that treat runoff from private developments;
 - (3) Education and outreach;
 - (4) Subsidies for retrofit projects;
 - (5) Requiring retrofit projects as enforcement, mitigation or ordinance compliance;
 - (6) Public and private partnerships;
 - (7) Fees for existing discharges to the MS4 and reduction of fees for retrofit implementation.

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e. Public Agency Facility and Activity Management

- i. Each Permittee shall obtain separate coverage under the Industrial General Permit for all Permittee-owned or operated facilities where industrial activities are conducted that require coverage under the Industrial General Permit.
- ii. Each Permittee shall implement the following measures for Permittee- owned and operated flood management projects:
 - (1) Develop procedures to assess the impacts of flood management projects on the water quality of receiving water bodies; and
 - (2) Evaluate existing structural flood control facilities to determine if retrofitting the facility to provide additional pollutant removal from storm water is feasible.
- iii. Each Permittee shall ensure the implementation and maintenance of activity specific BMPs listed in Table 18 (BMPs for Public Agency Facilities and Activities) when such activities occur at Permittee-owned or operated facilities and field activities (e.g., project sites) including but not limited to the facility types listed in Part VI.D.89.c above, and at any area that includes the activities described in Table 18, or that have the potential to discharge pollutants in storm water.
- iv. Any contractors hired by the Permittee to conduct Public Agency Activities including, but not limited to, storm and/or sanitary sewer system inspection and repair, street sweeping, trash pick-up and disposal, and street and right-of-way construction and repair shall be contractually required to implement and maintain the activity specific BMPs listed in Table 18. Each Permittee shall conduct oversight of contractor activities to ensure these BMPs are implemented and maintained.
- v. Permittee-owned or operated facilities that have obtained coverage under the Industrial General Permit shall implement and maintain BMPs consistent with the associated SWPPP and are therefore not required to implement and maintain the activity specific BMPs listed in Table 18.
- vi. Effective source control BMPs for the activities listed in Table 18 shall be implemented at Permittee-owned or operated facilities, unless the pollutant generating activity does not occur. Each Permittee shall require implementation of additional BMPs where storm water from the MS4 discharges to a significant ecological area (SEA, see Attachment A for definition), a water body subject to TMDL provisions in Part ~~V~~VI.E., or a CWA § 303(d) listed water body (see Part VI.E below). Likewise, for those BMPs that are not adequately protective of water quality standards, a Permittee may require additional site-specific controls.

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Table 18. BMPs for Public Agency Facilities and Activities

General and Activity Specific BMPs	
General BMPs	Scheduling and Planning
	Spill Prevention and Control
	Sanitary/Septic Waste Management
	Material Use
	Safer Alternative Products
	Vehicle/Equipment Cleaning, Fueling and Maintenance
	Illicit Connection Detection, Reporting and Removal
	Illegal Spill Discharge Control
	Maintenance Facility Housekeeping Practices
Flexible Pavement	Asphalt Cement Crack and Joint Grinding/ Sealing
	Asphalt Paving
	Structural Pavement Failure (Digouts) Pavement Grinding and Paving
	Emergency Pothole Repairs
	Sealing Operations
Rigid Pavement	Portland Cement Crack and Joint Sealing
	Mudjacking and Drilling
	Concrete Slab and Spall Repair
Slope/ Vegetation	Shoulder Grading
	Nonlandscaped Chemical Vegetation Control
	Nonlandscaped Mechanical Vegetation Control/ Mowing
	Nonlandscaped Tree and Shrub Pruning, Brush Chipping, Tree and Shrub Removal
	Fence Repair
	Drainage Ditch and Channel Maintenance
	Drain and Culvert Maintenance
	Curb and Sidewalk Repair
Litter/ Debris/ Graffiti	Sweeping Operations
	Litter and Debris Removal
	Emergency Response and Cleanup Practices
	Graffiti Removal
Landscaping	Chemical Vegetation Control
	Manual Vegetation Control
	Landscaped Mechanical Vegetation Control/ Mowing
	Landscaped Tree and Shrub Pruning, Brush Chipping, Tree and Shrub Removal
	Irrigation Line Repairs
	Irrigation (Watering), Potable and Nonpotable
Environmental	Storm Drain Stenciling
	Roadside Slope Inspection

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General and Activity Specific BMPs	
	Roadside Stabilization
	Stormwater Treatment Devices
	Traction Sand Trap Devices
Bridges	Welding and Grinding
	Sandblasting, Wet Blast with Sand Injection and Hydroblasting
	Painting
	Bridge Repairs
Other Structures	Pump Station Cleaning
	Tube and Tunnel Maintenance and Repair
	Tow Truck Operations
	Toll Booth Lane Scrubbing Operations
Electrical	Sawcutting for Loop Installation
Traffic Guidance	Thermoplastic Striping and Marking
	Paint Striping and Marking
	Raised/ Recessed Pavement Marker Application and Removal
	Sign Repair and Maintenance
	Median Barrier and Guard Rail Repair
	Emergency Vehicle Energy Attenuation Repair
Storm Maintenance	Minor Slides and Slipouts Cleanup/ Repair
Management and Support	Building and Grounds Maintenance
	Storage of Hazardous Materials (Working Stock)
	Material Storage Control (Hazardous Waste)
	Outdoor Storage of Raw Materials
	Vehicle and Equipment Fueling
	Vehicle and Equipment Cleaning
	Vehicle and Equipment Maintenance and Repair
	Aboveground and Underground Tank Leak and Spill Control

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f. Vehicle and Equipment Washing

- i. Each Permittee shall implement and maintain the activity specific BMPs listed in Table 18 (BMPs for Public Agency Facilities and Activities) for all fixed vehicle and equipment washing; including fire fighting and emergency response vehicles.
- ii. Each Permittee shall prevent discharges of wash waters from vehicle and equipment washing to the MS4 by implementing any of the following measures at existing facilities with vehicle or equipment wash areas:
 - (1) Self-contain, and haul off for disposal; or

(2) Equip with a clarifier or an alternative pre-treatment device and plumb to the sanitary sewer in accordance with applicable waste water provider regulations.

iii. Each Permittee shall ensure that any municipal facilities constructed, redeveloped, or replaced shall not discharge wastewater from vehicle and equipment wash areas to the MS4 by plumbing all areas to the sanitary sewer in accordance with applicable waste water provider regulations, or self-containing all waste water/ wash water and hauling to a point of legal disposal.

g. Landscape, Park, and Recreational Facilities Management

i. Each Permittee shall implement and maintain the activity specific BMPs listed in Table 18 for all public right-of-ways, flood control facilities and open channels, lakes and reservoirs, and landscape, park, and recreational facilities and activities.

ii. ~~Integrated Pest Management (IPM) is an ecosystem based strategy that focuses on long term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties.~~ Each Permittee shall implement an IPM program that includes the following:

(1) Pesticides are used only if monitoring indicates they are needed, and pesticides are applied according to applicable permits and established guidelines.

(2) Treatments are made with the goal of removing only the target organism.

(3) Pest controls are selected and applied in a manner that minimizes risks to human health, beneficial non-target organisms, and the environment.

(4) The use of pesticides, including Organophosphates and Pyrethroids, does not threaten water quality.

(5) Partner with other agencies and organizations to encourage the use of IPM.

(6) Adopt and verifiably implement policies, procedures, and/ or ordinances requiring the minimization of pesticide use and encouraging the use of IPM techniques (including beneficial insects) for Public Agency Facilities and Activities.

(7) Policies, procedures, and ordinances shall include commitments and a schedule to reduce the use of pesticides that cause impairment of surface waters by implementing the following procedures:

(a) Prepare and annually update an inventory of pesticides used by all internal departments, divisions, and other operational units.

(b) Quantify pesticide use by staff and hired contractors.

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(c) Demonstrate implementation of IPM alternatives where feasible to reduce pesticide use.

iii. Each Permittee shall implement the following requirements:

- (1) Use a standardized protocol for the routine and non-routine application of pesticides (including pre-emergents), and fertilizers.
- (2) Ensure there is no application of pesticides or fertilizers (1) when two or more consecutive days with greater than 50% chance of rainfall are predicted by NOAA³⁶, (2) within 48 hours of a ½-inch rain event, or (3) when water is flowing off the area where the application is to occur. This requirement does not apply to the application of aquatic pesticides described in Part VI.D.89.g.iii.(1) above or pesticides which require water for activation.
- (3) Ensure that no banned or unregistered pesticides are stored or applied.
- (4) Ensure that all staff applying pesticides are certified in the appropriate category by the California Department of Pesticide Regulation, or are under the direct supervision of a pesticide applicator certified in the appropriate category.
- (5) Implement procedures to encourage the retention and planting of native vegetation to reduce water, pesticide and fertilizer needs; and
- (6) Store pesticides and fertilizers indoors or under cover on paved surfaces, or use secondary containment.
 - (a) Reduce the use, storage, and handling of hazardous materials to reduce the potential for spills.
 - (b) Regularly inspect storage areas.

h. Storm Drain Operation and Maintenance

- i. Each Permittee shall implement and maintain the activity specific BMPs listed in Table 18 for storm drain operation and maintenance.
- ii. Ensure that all material removed from the MS4 does not reenter the system. Solid material shall be dewatered in a contained area and liquid material shall be disposed in accordance with any of the following measures:
 - (1) Self-contain, and haul off for legal disposal; or
 - ~~(1)~~(2) Applied to the land without runoff; or
 - ~~(2)~~(3) Equip with a clarifier or an alternative pre-treatment device; and plumb to the sanitary sewer in accordance with applicable waste water provider regulations.

iii. Catch Basin Cleaning

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³⁶ www.srh.noaa.gov/forecast

- (1) In areas that are not subject to a trash TMDL, each Permittee shall determine priority areas and shall update its map or list of Catch Basins with their GPS coordinates and priority:

Priority A: Catch basins that are designated as consistently generating the highest volumes of trash and/or debris.

Priority B: Catch basins that are designated as consistently generating moderate volumes of trash and/or debris.

Priority C: Catch basins that are designated as generating low volumes of trash and/or debris.

The map or list shall contain the rationale or data to support priority designations.

- (2) In areas that are not subject to a trash TMDL, each Permittee shall inspect catch basins according to the following schedule:

Priority A: A minimum of 3 times during the wet season (October 1 through April 15) and once during the dry season every year.

Priority B: A minimum of once during the wet season and once during the dry season every year.

Priority C: A minimum of once per year.

Catch basins shall be cleaned as necessary on the basis of inspections. At a minimum, Permittees shall ensure that any catch basin that is determined to be at least 25% full of trash shall be cleaned out. Permittees shall maintain inspection and cleaning records for Regional Water Board review.

- (3) In areas that are subject to a trash TMDL, the subject Permittees shall implement the applicable provisions in Part VI.E.

iv. Trash Management at Public Events

- (1) Each Permittee shall require the following measures for any event in the public right of way or wherever it is foreseeable that substantial quantities of trash and litter may be generated, including events located in areas that are subject to a trash TMDL:

(a) Proper management of trash and litter generated; and

(b) Arrangement for temporary screens to be placed on catch basins; or

(c) Provide clean out of catch basins, trash receptacles, and grounds in the event area within ~~24 hours~~ one business day subsequent to the event.

v. Trash Receptacles

- (1) Each Permittee shall ensure trash receptacles, or equivalent trash capturing devices, are covered in areas newly identified as high trash generation areas within its jurisdiction.

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- (2) Each Permittee shall ensure that all trash receptacles are cleaned out and maintained as necessary to prevent trash overflow.

vi. Catch Basin Labels and Open Channel Signage

- (1) Each Permittee shall label all storm drain inlets that they own with a legible “no dumping” message.
- (2) Each Permittee shall inspect the legibility of the stencil or label nearest each inlet prior to the wet season every year.
- (3) Each Permittee shall record all catch basins with illegible stencils and re-stencil or re-label within 180 days of inspection.
- (4) Each Permittee shall post signs, referencing local code(s) that prohibit littering and illegal dumping, at designated public access points to open channels, creeks, urban lakes, and other relevant water bodies.

vii. Additional Trash Management Practices

- (1) In areas that are not subject to a trash TMDL, each Permittee shall install trash excluders, or equivalent devices, on or in catch basins or outfalls to prevent the discharge of trash to the MS4 or receiving water no later than ~~two~~ four years after the effective date of this Order in areas defined as Priority A (Part VI.D.89.h.iii.(1)) except at sites where the application of such BMP(s) alone will cause flooding. Lack of maintenance that causes flooding is not an acceptable exception to the requirement to install BMPs. Alternatively, each Permittee may implement alternative or enhanced BMPs beyond the provisions of this Order (such as but not limited to increased street sweeping, adding trash cans near trash generation sites, prompt enforcement of trash accumulation, increased trash collection on public property, increased litter prevention messages or trash nets within the MS4) that provide substantially equivalent removal of trash. Each Permittee shall demonstrate that BMPs, which substituted for trash excluders, provide equivalent trash removal performance as excluders. When outfall trash capture is provided, revision of the schedule for inspection and cleanout of catch basins in Part VI.D.89.h.iii.(2) shall be reported in the next year’s annual report.

viii. Storm Drain Maintenance

Each Permittee shall implement a program for Storm Drain Maintenance that includes the following:

- (1) Visual monitoring of Permittee-owned open channels and other drainage structures, ~~including debris basins,~~ for trash and debris at least annually.
- (2) Removal of trash and debris from open channels ~~and debris basins~~ a minimum of once per year before the wet season.
- (3) Elimination of the discharge of contaminants during MS4 maintenance and clean outs.

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- (4) Proper disposal of debris and trash removed during storm drain maintenance.

ix. Infiltration from Sanitary Sewer to MS4/Preventive Maintenance

- (1) Each Permittee shall implement controls and measures to prevent and eliminate infiltration of seepage from sanitary sewers to MS4s through thorough, routine preventive maintenance of the MS4.
- (2) Each Permittee that operates both a municipal sanitary sewer system and a MS4 must implement controls and measures to prevent and eliminate infiltration of seepage from the sanitary sewers to the MS4s that must include overall sanitary sewer and MS4 surveys and thorough, routine preventive maintenance of both. Implementation of a Sewer System Management Plan in accordance with the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, may be used to fulfill this requirement.
- (3) Each Permittee shall implement controls to limit infiltration of seepage from sanitary sewers to the MS4 where necessary. Such controls must include:
- (a) Adequate plan checking for construction and new development;
 - (b) Incident response training for its municipal employees that identify sanitary sewer spills;
 - (c) Code enforcement inspections;
 - (d) MS4 maintenance and inspections;
 - (e) Interagency coordination with sewer agencies; and
 - (f) Proper education of its municipal staff and contractors conducting field operations on the MS4 or its municipal sanitary sewer (if applicable).

x. Permittee Owned Treatment Control BMPs

- (1) Each Permittee shall implement an inspection and maintenance program for all Permittee owned treatment control BMPs, including post-construction treatment control BMPs.
- (2) Each Permittee shall ensure proper operation of all treatment control BMPs and maintain them as necessary for proper operation, including all post-construction treatment control BMPs.
- (3) Any residual water³⁷ produced by a treatment control BMP and not being internal to the BMP performance when being maintained shall be:
- (a) Hauled away and legally disposed of; or
 - (b) Applied to the land without runoff; or
 - (c) Discharged to the sanitary sewer system (with permits or authorization); or

³⁷ To be defined in Definitions (see Attachment A).

(d) Treated or filtered to remove bacteria, sediments, nutrients, and meet the limitations set in Table 19 (Discharge Limitations for Dewatering Treatment BMPs), prior to discharge to the MS4.

Table 19. Discharge Limitations for Dewatering Treatment BMPs³⁸

Parameter	Units	Limitation
Total Suspended Solids	mg/L	100
Turbidity	NTU	50
Oil and Grease	mg/L	10

i. Streets, Roads, and Parking Facilities Maintenance

i. Each Permittee shall designate streets and/or street segments within its jurisdiction as one of the following:

Priority A: Streets and/or street segments that are designated as consistently generating the highest volumes of trash and/or debris.

Priority B: Streets and/or street segments that are designated as consistently generating moderate volumes of trash and/or debris.

Priority C: Streets and/or street segments that are designated as generating low volumes of trash and/or debris.

ii. Each Permittee shall perform street sweeping of curbed streets according to the following schedule:

Priority A: Streets and/or street segments that are designated as Priority A shall be swept at least two times per month.

Priority B: Streets and/or street segments that are designated as Priority B shall be swept at least once per month.

Priority C: Streets and/or street segments that are designated as Priority C shall be swept as necessary but in no case less than once per year.

iii. Road Reconstruction

Each Permittee shall require that for any project that includes roadbed or street paving, repaving, patching, digouts, or resurfacing roadbed surfaces, that the following BMPs be implemented for each project.

(1) Restrict paving and repaving activity to exclude periods of rainfall or predicted rainfall³⁹ unless required by emergency conditions.

(2) Install sand bags or gravel bags and filter fabric at all susceptible storm drain inlets and at manholes to prevent spills of paving products and tack coat;

³⁸ Technology based effluent limits/limitations.

³⁹ A probability of precipitation (POP) of 50% is required.

- (3) Prevent the discharge of release agents including soybean oil, other oils, or diesel into the MS4 or receiving waters.
- (4) Prevent non-storm water runoff from water use for the roller and for evaporative cooling of the asphalt.
- (5) Clean equipment over absorbent pads, drip pans, plastic sheeting or other material to capture all spillage and dispose of properly.
- (6) Collect liquid waste in a container, with a secure lid, for transport to a maintenance facility to be reused, recycled or disposed of properly.
- (7) Collect solid waste by vacuuming or sweeping and securing in an appropriate container for transport to a maintenance facility to be reused, recycled or disposed of properly.
- (8) Cover the "cold-mix" asphalt (i.e., pre-mixed aggregate and asphalt binder) with protective sheeting during a rainstorm.
- (9) Cover loads with tarp before haul-off to a storage site, and do not overload trucks.
- (10) Minimize airborne dust by using water spray during grinding.
- (11) Avoid stockpiling soil, sand, sediment, asphalt material and asphalt grindings materials or rubble in or near MS4 or receiving waters.
- (12) Protect stockpiles with a cover or sediment barriers during a rain.

iv. Parking Facilities Maintenance

- (1) Permittee-owned parking lots exposed to storm water shall be kept clear of debris and excessive oil buildup and cleaned ~~using street sweeping equipment~~ no less than 2 times per month and/or inspected no less than 2 times per month to determine if cleaning is necessary. In no case shall a Permittee-owned parking lot be cleaned less than once a month.

j. Emergency Procedures

- i. Each Permittee may conduct repairs of essential public service systems and infrastructure in emergency situations with a self-waiver of the provisions of this Order as follows:
 - (1) The Permittee shall abide by all other regulatory requirements, including notification to other agencies as appropriate.
 - (2) Where the self-waiver has been invoked, the Permittee shall submit to the Regional Water Board Executive Officer a statement of the occurrence of the emergency, an explanation of the circumstances, and the measures that were implemented to reduce the threat to water quality, no later than 30 business days after the situation of emergency has passed.
 - (3) Minor repairs of essential public service systems and infrastructure in emergency situations (that can be completed in less than ~~one~~ three days)

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are not subject to the notification provisions. Appropriate BMPs to reduce the threat to water quality shall be implemented.

k. Municipal Employee and Contractor Training

i. Each Permittee shall, no later than 1 year after Order adoption and annually thereafter before June 30, train all of their employees ~~and contractors~~ in targeted positions (whose interactions, jobs, and activities affect storm water quality) on the requirements of the overall storm water management program, or shall ensure contractors performing privatized/contracted municipal services are appropriately trained to:

(1) Promote a clear understanding of the potential for activities to pollute storm water.

(2) Identify opportunities to require, implement, and maintain appropriate BMPs in their line of work.

(2) Outside contractors can self-certify, providing they certify they have received all applicable training required in the Permit and have documentation to that effect.

ii. Each Permittee shall, no later than 1 year after Order adoption and annually thereafter before June 30, train all of their employees and contractors who use or have the potential to use pesticides or fertilizers (whether or not they normally apply these as part of their work). Training programs shall address:

(1) The potential for pesticide-related surface water toxicity.

(2) Proper use, handling, and disposal of pesticides.

(3) Least toxic methods of pest prevention and control, including IPM.

(4) Reduction of pesticide use.

(4)iii. Outside contractors can self-certify, providing they certify they have received all applicable training required in the Permit and have documentation to that effect.

9-10. Illicit Connections and Illicit Discharges Elimination Program

a. General

i. Each Permittee shall continue to implement an Illicit Connection and Illicit Discharge Elimination (IC/ID) Program to detect, investigate, and eliminate IC/IDs to the MS4. The IC/ID Program must be implemented in accordance with the requirements and performance measures specified in this Order.

ii. As stated in Part VI.FA.4-2 of this Order, each Permittee must have adequate legal authority to prohibit IC/IDs to the MS4 and enable enforcement capabilities to eliminate the source of IC/IDs.

iii. Each Permittee's IC/ID Program shall consist of at least the following major program components:

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- (1) Procedures for conducting source investigations for IC/IDs
- (2) Procedures for eliminating the source of IC/IDs
- (3) Procedures for public reporting of illicit discharges
- (4) Spill response plan
- (5) IC/IDs education and training for Permittee staff

b. Illicit Discharge Source Investigation and Elimination

- i. Each Permittee shall develop written procedures for conducting investigations to identify the source of all suspected illicit discharges, including procedures to eliminate the discharge once the source is located.
- ii. At a minimum, each Permittee shall initiate an investigation(s) to identify and locate the source within 72 hours of becoming aware of the illicit discharge.
- iii. When conducting investigations, each Permittee shall comply with the following:
 - (1) Illicit discharges suspected of being sanitary sewage and/or significantly contaminated shall be investigated first.
 - (2) Each Permittee shall track all investigations to document at a minimum the date(s) the illicit discharge was observed; the results of the investigation; any follow-up of the investigation; and the date the investigation was closed.
 - (3) Each Permittee shall investigate the source of all observed illicit discharges.
- iv. When taking corrective action to eliminate illicit discharges, each Permittee shall comply with the following:
 - (1) If the source of the illicit discharge has been determined to originate within the Permittee's jurisdiction, the Permittee shall immediately notify the responsible party/parties of the problem, and require the responsible party to initiate all necessary corrective actions to eliminate the illicit discharge. Upon being notified that the discharge has been eliminated, the Permittee shall conduct a follow-up investigation to verify that the discharge has been eliminated and cleaned-up to the satisfaction of the Permittee(s). Each Permittee shall document its follow-up investigation. Each Permittee may seek recovery and remediation costs from responsible parties or require compensation for the cost of all inspection, investigation, cleanup and oversight activities. Resulting enforcement actions shall follow the program's Progressive Enforcement Policy, per Part VI.D.2.
 - (2) If the source of the illicit discharge has been determined to originate within an upstream jurisdiction, the Permittee shall notify the upstream jurisdiction and the Regional Water Board within 30 days of such determination and provide all of the information collected regarding efforts to identify its source. Each Permittee may seek recovery and remediation

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costs from responsible parties or require compensation for the cost of all inspection, investigation, cleanup and oversight activities. Resulting enforcement actions shall follow the program’s Progressive Enforcement Policy, per Part VI.D.2.

(3) If the source of the illicit discharge cannot be traced to a suspected responsible party, affected Permittees shall implement its spill response plan and then initiate a permanent solution as described in section 910.b.v below.

v. In the event the Permittee is unable to eliminate an ongoing illicit discharge following full execution of its legal authority and in accordance with its Progressive Enforcement Policy, or other circumstances prevent the full elimination of an ongoing illicit discharge, including the inability to find the responsible party/parties, the Permittee shall provide for diversion of the entire flow to the sanitary sewer or provide treatment. In either instance, the Permittee shall notify the Regional Water Board in writing within 30 days of such determination and shall provide a written plan for review and comment that describes the efforts that have been undertaken to eliminate the illicit discharge, a description of the actions to be undertaken, anticipated costs, and a schedule for completion.

c. Identification and Response to Illicit Connections

~~i. Systematic Visual Inspections for Illicit Connections~~

~~The LACFGD shall continue the systematic field visual inspections of its MS4 for illicit connections in accordance with the following schedule:~~

- ~~(1) Open channels: No later than one year after the effective date of this Order, and annually thereafter.~~
- ~~(2) Underground storm drains identified by the LACFGD as high priority: No later than three years after the effective date of this Order.~~
- ~~(3) Underground storm drains with a diameter of 36 inches or greater: No later than by the Order expiration date.~~

~~ii.i. Investigation~~

~~Each Permittee, upon discovery or upon receiving a report of a suspected illicit connection, shall initiate an investigation within 21 days, to determine the following: (1) source of the connection, (2) nature and volume of discharge through the connection, and (3) responsible party for the connection.~~

~~ii.ii. Elimination~~

~~Each Permittee, upon confirmation of an illicit MS4 connection, shall ensure that the connection is:~~

- ~~(1) Permitted or documented, provided the connection will only discharge storm water and non-storm water allowed under this Order or other individual or general NPDES Permits/WDRs, or~~

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(2) Eliminated within 180 days of completion of the investigation, using its formal enforcement authority, if necessary, to eliminate the illicit connection.

iv.iii. Documentation

Formal records must be maintained for all illicit connection investigations and the formal enforcement taken to eliminate illicit connections.

d. Public Reporting of Non-Storm Water Discharges and Spills

- i. Each Permittee shall promote, publicize, and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into or from MS4s through a central contact point, including phone numbers and an internet site for complaints and spill reporting. Each Permittee shall also provide the reporting hotline to Permittee staff to leverage the field staff that has direct contact with the MS4 in detecting and eliminating illicit discharges.
- ii. Each Permittee shall implement the central point of contact and reporting hotline requirements listed in this part in one or more of the following methods:
 - (1) By participating in a County-wide sponsored hotline
 - (2) By participating in one or more Watershed Group sponsored hotlines
 - (3) Or individually within its own jurisdiction
 - (4) The LACFCD shall, in collaboration with the County, continue to maintain the 888-CLEAN-LA hotline and internet site to promote, publicize, and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into or from MS4s.
- iii. Each Permittee shall ensure that signage adjacent to open channels, as required in Part F.8.h.vi, include information regarding dumping prohibitions and public reporting of illicit discharges.
- iv. Each Permittee shall develop and maintain written procedures that document how complaint calls are received, documented, and tracked to ensure that all complaints are adequately addressed. The procedures shall be evaluated to determine whether changes or updates are needed to ensure that the procedures accurately document the methods employed by the Permittee. Any identified changes shall be made to the procedures subsequent to the evaluation.
- v. Each Permittee shall maintain documentation of the complaint calls and record the location of the reported spill or IC/ ID and the actions undertaken in response to all IC/ID complaints, including referrals to other agencies.

e. Spill Response Plan

- i. Each Permittee shall implement a spill response plan for all sewage and other spills that may discharge into its MS4. The spill response plan shall clearly identify agencies responsible for spill response and cleanup, telephone

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numbers and e-mail address for contacts, and shall contain at a minimum the following requirements:

- (1) Coordination with spill response teams throughout all appropriate departments, programs and agencies so that maximum water quality protection is provided.
- (2) Initiate investigation of all public and employee spill complaints within one business day of receiving the complaint to assess validity.
- (3) Response to spills for containment within 4 hours of becoming aware of the spill, except where such spills occur on private property, in which case the response should be within 2 hours of gaining legal access to the property.
- (4) Spills that may endanger health or the environment shall be reported to appropriate public health agencies and the Office of Emergency Services (OES).

f. Illicit Connection and Illicit Discharge Education and Training

- i. Each Permittee must continue to implement a training program regarding the identification of IC/IDs for all municipal field staff, who, as part of their normal job responsibilities (e.g., street sweeping, storm drain maintenance, collection system maintenance, road maintenance), may come into contact with or otherwise observe an illicit discharge or illicit connection to the MS4. Contact information, including the procedure for reporting an illicit discharge, must be readily available to field staff. Training program documents must be available for review by the permitting authority.

ii. Each Permittee shall ensure contractors performing privatized/contracted municipal services such as, but not limited to, storm and/or sanitary sewer system inspection and repair, street sweeping, trash pick-up and disposal, and street and right-of-way construction and repair are trained regarding IC/ID identification and reporting. Permittees may provide training or include contractual requirements for IC/ID identification and reporting training. Outside contractors can self-certify, providing they certify they have received all applicable training required in the Permit and have documentation to that effect.~~Each Permittee shall ensure contractors performing privatized/contracted municipal services such as, but not limited to, storm and/or sanitary sewer system inspection and repair, street sweeping, trash pick-up and disposal, and street and right-of-way construction and repair are trained regarding IC/ID identification and reporting. Permittees may provide training or include contractual requirements for IC/ID identification and reporting training.~~

- iii. Each Permittee's training program should address, at a minimum, the following:
 - (1) IC/ID identification, including definitions and examples,
 - (2) investigation,

- (3) elimination,
- (4) cleanup,
- (5) reporting, and
- (6) documentation.

- iv. Each Permittee must create a list of applicable positions and contractors which require IC/ID training and ensure that training is provided at least twice during the term of the Order. Each Permittee must maintain documentation of the training activities.
- v. New Permittee staff members must be provided with IC/ID training within 180 days of starting employment.

~~D.E. Special Provisions: Total Maximum Daily Load Provisions~~

- 1. The provisions of this Part VI.E. implement and are consistent with the assumptions and requirements of all waste load allocations (WLAs) established in TMDLs for which some or all of the Permittees in this Order are responsible.
 - a. Part VI.E of this Order includes provisions that are designed to assure that Permittees achieve WLAs and meet other requirements of TMDLs covering receiving waters impacted by the Permittees' MS4 discharges. TMDL provisions are grouped by WMA (WMA) in Attachments L through R.
 - b. The Permittees subject to each TMDL are identified in Attachment K.
 - c. The Permittees shall comply with the applicable water quality-based effluent limitations and/or receiving water limitations contained in Attachments L through R, consistent with the assumptions and requirements of the WLAs established in the TMDLs, including implementation plans and schedules, where provided for in the State adoption and approval of the TMDL (40 CFR §122.44(d)(1)(vii)(B); Cal. Wat. Code §13263(a)).
 - d. A Permittee may comply with water quality-based effluent limitations and/or receiving water limitations in Attachments L through R using any lawful means.

2. Compliance Determination

a. General

- i. A Permittee shall demonstrate compliance at compliance monitoring points established in each TMDL or, if not specified in the TMDL, at locations identified in an approved TMDL monitoring plan or in accordance with an approved integrated monitoring program per Attachment E, Part VI.C.5 (Integrated Watershed Monitoring and Assessment).
- ii. Compliance with water quality-based effluent limitations shall be determined as described in Parts VI.E.2.d and VI.E.2.e, or for trash water quality-based

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effluent limitations as described in Part VI.E.5.b, or as otherwise set forth in TMDL specific provisions in Attachments L through R.

- iii. Pursuant to Part VI.C, a Permittee may, individually or as part of a watershed-based group, develop and submit for approval by the Regional Water Board Executive Officer a Watershed Management Program that addresses all water quality-based effluent limitations and receiving water limitations to which the Permittee is subject pursuant to established TMDLs.

b. Commingled Discharges

- i. A number of the TMDLs establish WLAs that are assigned jointly to a group of Permittees whose storm water and/or non-storm water discharges are or may be commingled in the MS4 prior to discharge to the receiving water subject to the TMDL.
- ii. In these cases, pursuant to 40 CFR section 122.26(a)(3)(vi), each Permittee is only responsible for discharges from the MS4 for which they are owners and/or operators.
- iii. Where Permittees have commingled discharges to the receiving water, compliance at the outfall to the receiving water or in the receiving water shall be determined for the group of Permittees as a whole unless an individual Permittee demonstrates that its discharge did not cause or contribute to the exceedance, pursuant to subpart v. below.
- iv. For purposes of compliance determination, each Permittee is responsible for demonstrating that its discharge did not cause or contribute to an exceedance of an applicable water quality-based effluent limitation(s) at the outfall or receiving water limitation(s) in the target receiving water.
- v. A Permittee may demonstrate that its discharge did not cause or contribute to an exceedance of an applicable water quality-based effluent limitation or receiving water limitation in any of the following ways:
 - (1) Demonstrate that there is no discharge from the Permittee's MS4 into the applicable receiving water; or
 - (2) Demonstrate that the discharge from the Permittee's MS4 is treated controlled to a level that does not exceed the applicable water quality-based effluent limitation; or
 - (3) For exceedances of bacteria receiving water limitations or water quality-based effluent limitations, demonstrate through a source investigation pursuant to protocols established under California Water Code section 13178 or for exceedances of other receiving water limitations or water quality-based effluent limitations, demonstrate using other accepted source identification protocols, that pollutant sources within the jurisdiction

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of the Permittee or the Permittee's MS4 have not caused or contributed to the exceedance of the Receiving Water Limitation(s).

c. Receiving Water Limitations Addressed by a TMDL

- i. For receiving water limitations in Part V.A. associated with water body-pollutant combinations addressed in a TMDL, Permittees shall achieve compliance with the receiving water limitations in Part V.A. as outlined in this Part VI.E. and Attachments L through R of this Order.
- ii. A Permittee shall not be considered in violation of Part V.A. of this Order for the specific pollutant addressed in the TMDL, if it is in compliance with the applicable TMDL requirement(s), including compliance schedules, of this Part VI.E. and Attachments L through R.
- iii. As long as a Permittee is in compliance with the applicable TMDL requirements in a time schedule order (TSO) issued by the Regional Water Board pursuant to California Water Code sections 13300 and 13385(j)(3), it is not the Regional Water Board's intention to take an enforcement action for violations of Part V.A. of this Order for the specific pollutant(s) addressed in the TSO.

d. Interim Water Quality-Based Effluent Limitations and Receiving Water Limitations

- i. A Permittee shall be considered in compliance with an applicable interim water quality-based effluent limitation and/or interim receiving water limitation for the a pollutant(s) associated with a specific TMDL if any of the following is demonstrated:
 - (1) There are no violations of the interim water quality-based effluent limitation for the pollutant(s) associated with a specific TMDL at the Permittee's applicable MS4 outfall(s),⁴⁰ including an outfall to the receiving water that collects discharges from multiple Permittees' jurisdictions;
 - (2) There are no exceedances of the applicable receiving water limitation for the pollutant(s) associated with a specific TMDL in the receiving water(s) at, or downstream of, the Permittee's outfall(s);
 - (3) There is no direct or indirect discharge from the Permittee's MS4 to the receiving water during the time period subject to the water quality-based effluent limitation and/or receiving water limitation for the pollutant(s) associated with a specific TMDL; or
 - (4) The Permittee has submitted and is fully implementing an approved Watershed Management Program pursuant to Part VI.C that provides

⁴⁰ An outfall may include a manhole or other point of access to the MS4 at the Permittee's jurisdictional boundary.

reasonable assurance that interim water quality-based effluent limitations will be achieved per applicable compliance schedules.

(a) To be considered fully implementing an approved Watershed Management Program, a Permittee must be implementing actions consistent with the approved program and applicable compliance schedules, including structural BMPs.

(b) Structural storm water BMPs ~~must~~ should be designed and maintained to treat storm water runoff from the 85th percentile, 24-hour storm, where feasible and necessary to achieve applicable WQBELs and receiving water limitations, and maintenance records must be up-to-date and available for inspection by the Regional Water Board.

(c) A Permittee that does not implement the Watershed Management Program in accordance with the milestones and compliance schedules shall demonstrate compliance with its interim water quality-based effluent limitations and/or receiving water limitations pursuant to Part VI.E.2.d.i.(1)-(3), above.

(d) A Permittee shall not be considered in violation of interim WQBELs with compliance deadlines occurring prior to approval of a WMP, if all the following requirements are met:

(1) Provides timely notice of its intent to develop a WMP,

(2) Meets all deadlines for submittal of a WMP,

(3) Implements watershed control measures identified in its notification to achieve interim WQBELs with compliance deadlines occurring prior to approval of a WMP, and

(4) Receives final approval of its WMP.

e. Final Water Quality-based Effluent Limitations and/or Receiving Water Limitations

i. A Permittee shall be deemed in compliance with an applicable final water quality-based effluent limitation and/or final receiving water limitation for the pollutant(s) associated with a specific TMDL if any of the following is demonstrated:

(1) There are no violations of the final water quality-based effluent limitation for the specific pollutant at the Permittee's applicable MS4 outfall(s)⁴¹;

⁴¹ Ibid.

- (2) There are no exceedances of applicable receiving water limitation for the specific pollutant in the receiving water(s) at, or downstream of, the Permittee's outfall(s); or
- (3) There is no direct or indirect discharge from the Permittee's MS4 to the receiving water during the time period subject to the water quality-based effluent limitation and/or receiving water limitation for the pollutant(s) associated with a specific TMDL.

3. USEPA Established TMDLs

TMDLs established by the USEPA, to which Permittees are subject, do not contain an implementation plan adopted pursuant to California Water Code section 13242. However, USEPA has included implementation recommendations as part of these TMDLs. In lieu of inclusion of numeric water quality based effluent limitations at this time, this Order requires Permittees subject to WLAs in USEPA established TMDLs to propose and implement best management practices (BMPs) that will be effective in ultimately achieving the numeric WLAs. The Regional Water Board may, at its discretion, revisit this decision within the term of this Order or in a future permit, as more information is developed to support the inclusion of numeric water quality based effluent limitations.

- a. Each Permittee shall propose BMPs to achieve the WLAs contained in the applicable USEPA established TMDL(s), and a schedule for implementing the BMPs that is as short as possible, in a Watershed Management Program-Plan.
- b. Each Permittee may either individually submit a Watershed Management Program Plan, or may jointly submit a plan with all other Permittees subject to the WLAs contained in the USEPA established TMDL.
- c. At a minimum, each Permittee shall include the following information in its Watershed Management Program Plan, relevant to each applicable USEPA established TMDL:
 - i. Available data demonstrating the current quality of the Permittee's MS4 discharge(s) in terms of concentration and/or load of the target pollutant(s) to the receiving waters subject to the TMDL;
 - ii. A detailed description of BMPs that have been implemented, and/or are currently being implemented by the Permittee to achieve the WLA(s), if any;
 - iii. A detailed time schedule of specific actions the Permittee will take in order to achieve the applicable WLA(s);
 - iv. A demonstration that the time schedule requested is as short as possible, taking into account the time since USEPA establishment of the TMDL, and technological, operation, and economic factors that affect the design,

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development, and implementation of the control measures that are necessary to comply with the WLA(s);

(1) For the Malibu Creek Nutrient TMDL established by USEPA in 2003, in no case shall the time schedule to achieve the final numeric WLAs exceed five years from the effective date of this Order; and

- v. If the requested time schedule exceeds one year, the proposed schedule shall include interim requirements and numeric milestones and the date(s) for their achievement.
- d. Each Permittee subject to a WLA in a TMDL established by USEPA since January 1, 2010 shall submit a draft of a Watershed Management Program Plan to the Regional Water Board Executive Officer for approval no later than one year after the effective date of this Order.
- e. Each Permittee subject to a WLA in a TMDL established by USEPA prior to January 1, 2010 shall submit a draft of a Watershed Management Program Plan to the Regional Water Board Executive Officer for approval no later than six months after the effective date of this Order.
- f. If a Permittee does not submit a Watershed Management Program Plan, or the plan is determined to be inadequate by the Regional Water Board Executive Officer and the Permittee does not make the necessary revisions within 90 days of written notification that plan is inadequate, the Permittee shall be required to demonstrate compliance with the numeric WLAs immediately based on monitoring data collected under the MRP (Attachment E) for this Order.

4. State Adopted TMDLs where Final Compliance Deadlines have Passed

- a. Permittees shall comply immediately with water quality-based effluent limitations and/or receiving water limitations to implement WLAs in state-adopted TMDLs for which final compliance deadlines have passed pursuant to the TMDL implementation schedule.
- b. Where a Permittee believes that additional time to comply with the final water quality-based effluent limitations and/or receiving water limitations is necessary, a Permittee may within 45 days of Order adoption request a time schedule order pursuant to California Water Code section 13300 for the Regional Water Board's consideration.
- c. Permittees may either individually request a TSO, or may jointly request a TSO with all Permittees subject to the water quality-based effluent limitations and/or receiving water limitations, to implement the WLAs in the state-adopted TMDL.
- d. At a minimum, a request for a time schedule order shall include the following:

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- i. Data demonstrating the current quality of the MS4 discharge(s) in terms of concentration and/or load of the target pollutant(s) to the receiving waters subject to the TMDL;
- ii. A detailed description and chronology of structural controls and source control efforts, since the effective date of the TMDL, to reduce the pollutant load in the MS4 discharges to the receiving waters subject to the TMDL;
- iii. Justification of the need for additional time to achieve the water quality-based effluent limitations and/or receiving water limitations;
- iv. A detailed time schedule of specific actions the Permittee will take in order to achieve the water quality-based effluent limitations and/or receiving water limitations;
- v. A demonstration that the time schedule requested is as short as possible, taking into account the technological, operation, and economic factors that affect the design, development, and implementation of the control measures that are necessary to comply with the effluent limitation(s); and
- vi. If the requested time schedule exceeds one year, the proposed schedule shall include interim requirements and the date(s) for their achievement. The interim requirements shall include both of the following:
 - (1) Effluent limitation(s) for the pollutant(s) of concern; and
 - (2) Actions and milestones leading to compliance with the effluent limitation(s).

5. Water Quality-Based Effluent Limitations for Trash

Permittees assigned a Waste Load Allocation in a trash TMDL shall comply as set forth below.

- a. **Effluent Limitations:** Permittees shall comply with the interim and final water quality-based effluent limitations for trash set forth in Attachments L through R for the following Trash TMDLs:
 - i. Lake Elizabeth Trash TMDL (Attachment L)
 - ii. Santa Monica Bay Nearshore and Offshore Debris TMDL (Attachment M)
 - iii. Malibu Creek Watershed Trash TMDL (Attachment M)
 - iv. Ballona Creek Trash TMDL (Attachment M)
 - v. Machado Lake Trash TMDL (Attachment N)
 - vi. Los Angeles River Trash TMDL (Attachment O)
 - vii. Peck Road Park Lake Trash TMDL (Attachment O)

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viii. Echo Park Lake Trash TMDL (Attachment O)

ix. Legg Lake Trash TMDL (Attachment PQ)

b. Compliance

- i. Pursuant to California Water Code section 13360(a), Permittees may comply with the trash effluent limitations using any lawful means. Such compliance options are broadly classified as *full capture*, *partial capture*, *institutional controls*, or *minimum frequency of assessment and collection*, as described below, and any combination of these may be employed to achieve compliance:

(1) Full Capture Systems:

- (a) The Basin Plan authorizes the Regional Water Board Executive Officer to certify *full capture systems*, which are systems that meet the operating and performance requirements as described in this Order, and the procedures identified in “Procedures and Requirements for Certification of a Best Management Practice for Trash Control as a Full Capture System.”⁴²
- (b) Permittees are authorized to comply with their effluent limitations through certified *full capture systems* provided the requirements of paragraph (c), immediately below, and any conditions in the certification, continue to be met.
- (c) Permittees may comply with their effluent limitations through progressive installation of *full capture systems* throughout their jurisdictional areas until all areas draining to Lake Elizabeth, Santa Monica Bay, Malibu Creek, Ballona Creek, Machado Lake, the Los Angeles River system, Legg Lake, Peck Road Park Lake, and/or Echo Park Lake are addressed. For purposes of this Order, attainment of the effluent limitations shall be conclusively presumed for any drainage area to Lake Elizabeth, Santa Monica Bay, Malibu Creek (and its tributaries), Ballona Creek (and its tributaries), Machado Lake, the Los Angeles River (and its tributaries), Legg Lake, Peck Road Park Lake, and/or Echo Park Lake, ~~and/or Lincoln Park Lake~~ where certified *full capture systems* treat all drainage from the area, provided that the *full capture systems* are adequately sized and maintained, and that maintenance records are up-to-date and available for inspection by the Regional Water Board.

⁴² The Regional Water Board currently recognizes eight *full capture systems*. These are: Vortex Separation Systems (VSS) and seven other Executive Officer certified *full capture systems*, including specific types or designs of trash nets; two gross solids removal devices (GSRDs); catch basin brush inserts and mesh screens; vertical and horizontal trash capture screen inserts; and a connector pipe screen device. See August 3, 2004 Los Angeles Regional Water Quality Control Board Memorandum titled “Procedures and Requirements for Certification of a Best Management Practice for Trash Control as a Full Capture System.”

- (i) A Permittee shall be deemed in compliance with its final effluent limitation if it demonstrates that all drainage areas under its jurisdiction and/or authority are serviced by appropriate certified *full capture systems* as described in paragraph (1)(c).
- (ii) A Permittee shall be deemed in compliance with its interim effluent limitations, where applicable:
1. By demonstrating that *full capture systems* treat the percentage of drainage areas in the watershed that corresponds to the required trash abatement.
 2. Alternatively, a Permittee may propose a schedule for installation of *full capture systems* in areas under its jurisdiction and/or authority within a given watershed, targeting first the areas of greatest trash generation, for the Executive Officer's approval. The Executive Officer shall not approve any such schedule that does not result in timely compliance with the final effluent limitations, consistent with the established TMDL implementation schedule and applicable State policies. A Permittee shall be deemed in compliance with its interim effluent limitations provided it is fully in compliance with any such approved schedule.
- (2) Partial Capture Devices and Institutional Controls: Permittees may comply with their interim and final effluent limitations through the installation of *partial capture devices* and the application of *institutional controls*.⁴³
- (a) Trash discharges from areas serviced solely by *partial capture devices* may be estimated based on demonstrated performance of the device(s) in the implementing area.⁴⁴ That is, trash reduction is equivalent to the *partial capture devices'* trash removal efficiency multiplied by the percentage of drainage area serviced by the devices.
- (b) Except as provided in subdivision (c), immediately below, trash discharges from areas addressed by *institutional controls* and/or *partial capture devices* (where site-specific performance data is not available) shall be calculated using a mass balance approach, based on the daily generation rate (DGR) for a representative area.⁴⁵ The DGR shall be determined from direct measurement of trash deposited in the drainage area during any thirty-day period between June 22nd and September 22nd exclusive of rain events⁴⁶, and shall be re-calculated every year thereafter unless a less frequent period for recalculation is approved by the Regional Water Board Executive Officer. The DGR

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⁴³ While interim effluent limitations may be complied with using *partial capture devices*, compliance with final effluent limitations cannot be achieved with the exclusive use of *partial capture devices*.

⁴⁴ Performance shall be demonstrated under different conditions (e.g. low to high trash loading).

⁴⁵ The area(s) should be representative of the land uses and activities within the Permittees' authority and shall be approved by the Executive Officer prior to the 30-day collection period.

⁴⁶ Provided no special events are scheduled that may affect the representative nature of that collection period.

shall be calculated as the total amount of trash collected during this period divided by the length of the collection period.

$$\text{DGR} = (\text{Amount of trash collected during a 30-day collection period})^{47} / (30 \text{ days})$$

The DGR for the applicable area under the Permittees' jurisdiction and/or authority shall be extrapolated from that of the representative drainage area(s). A mass balance equation shall be used to estimate the amount of trash discharged during a storm event.⁴⁸ The *Storm Event Trash Discharge* for a given rain event in the Permittee's drainage area shall be calculated by multiplying the number of days since the last street sweeping by the DGR and subtracting the amount of any trash recovered in the catch basins.⁴⁹ For each day of a storm event that generates precipitation greater than 0.25 inch, the Permittee shall calculate a *Storm Event Trash Discharge*.

$$\text{Storm Event Trash Discharge} = [(\text{Days since last street sweeping} * \text{DGR})] - [\text{Amount of trash recovered from catch basins}]^{50}$$

The sum of the *Storm Event Trash Discharges* for the storm year shall be the Permittee's calculated annual trash discharge.

$$\text{Total Storm Year Trash Discharge} = \sum \text{Storm Event Trash Discharges from Drainage Area}$$

- (c) The Executive Officer may approve alternative compliance monitoring approaches for calculating total storm year trash discharge, upon finding that the program will provide a scientifically-based estimate of the amount of trash discharged from the Permittee's MS4.

(3) Combined Compliance Approaches:

Permittees may comply with their interim and final effluent limitations through a combination of *full capture systems*, *partial capture devices*, and *institutional controls*. Where a Permittee relies on a combination of approaches, it shall demonstrate compliance with the interim and final effluent limitations as specified in (1)(c) in areas where *full capture systems* are installed and as specified in (2)(a) or (2)(b), as appropriate, in areas where *partial capture devices* and *institutional controls* are applied.

(4) Minimum Frequency of Assessment and Collection Approach:

⁴⁷ Between June 22nd and September 22nd

⁴⁸ Amount of trash shall refer to the uncompressed volume (in gallons) or drip-dry weight (in pounds) of trash collected.

⁴⁹ Any negative values shall be considered to represent a zero discharge.

⁵⁰ When more than one storm event occurs prior to the next street sweeping the discharge shall be calculated from the date of the last assessment.

If allowed in a trash TMDL and approved by the Executive Officer, a Permittee may alternatively comply with its final effluent limitations by implementing a program for *minimum frequency of assessment and collection* (MFAC) in conjunction with BMPs. To the satisfaction of the Executive Officer, the MFAC/BMP program must meet the following criteria:

- (a) The MFAC/BMP Program includes an initial minimum frequency of trash assessment and collection and suite of structural and/or nonstructural BMPs. The MFAC/BMP program shall include collection and disposal of all trash found in the receiving water and shoreline. Permittees shall implement an initial suite of BMPs based on current trash management practices in land areas that are found to be sources of trash to the water body. The initial minimum frequency of trash assessment and collection shall be set as specified in the following TMDLs:
 - (i) Malibu Creek Watershed Trash TMDL
 - (ii) Machado Lake Trash TMDL
 - (iii) Legg Lake Trash TMDL
- (b) The MFAC/BMP Program includes reasonable assurances that it will be implemented by the responsible Permittees.
- (c) MFAC protocols may be based on SWAMP protocols for rapid trash assessment, or alternative protocols proposed by Permittees and approved by the Regional Water Board Executive Officer.
- (d) Implementation of the MFAC/BMP program should include a Health and Safety Program to protect personnel. The MFAC/BMP program shall not require Permittees to access and collect trash from areas where personnel are prohibited.
- (e) The Regional Water Board Executive Officer may approve or require a revised assessment and collection frequency and definition of the critical conditions under the MFAC:
 - (i) To prevent trash from accumulating in deleterious amounts that cause nuisance or adversely affect beneficial uses between collections;
 - (ii) To reflect the results of trash assessment and collection;
 - (iii) If the amount of trash collected does not show a decreasing trend, where necessary, such that a shorter interval between collections is warranted; or
 - (iv) If the amount of trash collected is decreasing such that a longer interval between collections is warranted.
- (f) At the end of the implementation period, a revised MFAC/BMP program may be required if the Regional Water Board Executive

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Officer determines that the amount of trash accumulating between collections is causing nuisance or otherwise adversely affecting beneficial uses.

(g) With regard to (4)(e)(i), (4)(e)(ii), or (4)(e)(iii), above, the Regional Water Board Executive Officer is authorized to allow responsible Permittees to implement additional structural or non-structural BMPs in lieu of modifying the monitoring frequency.

ii. If a Permittee is not in compliance with its applicable interim and/or final effluent limitation as identified in Attachments L through R, then it shall be in violation of this Order.

(1) A Permittee relying on *partial capture devices* and/or *institutional controls* that has violated its interim and/or final effluent limitation(s) shall be presumed to have violated the applicable limitation for each day of each storm event that generated precipitation greater than 0.25 inch during the applicable storm year, except those storm days on which it establishes that its cumulative Storm Event Trash Discharges has not exceeded the applicable effluent limitation.

(2) If a Permittee relying on *full capture systems* has failed to demonstrate that the *full capture systems* for any drainage area are adequately sized and maintained, and that maintenance records are up-to-date and available for inspection by the Regional Water Board, and that it is in compliance with any conditions of its certification, shall be presumed to have discharged trash in an amount that corresponds to the percentage of the baseline waste load allocation represented by the drainage area in question.

(a) A Permittee may overcome this presumption by demonstrating (using any of the methods authorized in Part VI.E.5.b) that the actual or calculated discharge for that drainage area is in compliance with the applicable interim or final effluent limitation.

iii. Each Permittee shall be held liable for violations of the effluent limitations assigned to their area. If a Permittee's compliance strategy includes *full* or *partial capture devices* and it chooses to install a full or partial capture device in the MS4 physical infrastructure of another public entity, it is responsible for obtaining all necessary permits to do so. If a Permittee believes it is unable to obtain the permits needed to install a full capture or partial capture device within another Permittee's MS4 physical infrastructure, either Permittee may request the Executive Officer to hold a conference with the Permittees. Nothing in this Order shall affect the right of that public entity or a Permittee to seek indemnity or other recourse from the other as they deem appropriate. Nothing in this subsection shall be construed as relieving a Permittee of any liability that the Permittee would otherwise have under this Order.

c. Monitoring and Reporting Requirements (pursuant to California Water Code section 13383)

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- i. Each Permittee shall submit a TMDL Compliance Report as part of its Annual Report detailing compliance with the applicable interim and/or final effluent limitations. Reporting shall include the information specified below. The report shall be submitted on the reporting form specified by the Regional Water Board Executive Officer. The report shall be signed under penalty of perjury by the Permittee's principal executive officer or ranking elected official or duly authorized representative of the officer, consistent with Part V.B of Attachment D (Standard Provisions), who is responsible for ensuring compliance with this Order. Each Permittee shall be charged with and shall demonstrate compliance with its applicable effluent limitations beginning with its December 15, 2013, ~~October 31, 2012~~ TMDL Compliance Report.

(1) Reporting Compliance based on Full Capture Systems: Permittees shall provide information on the number and location of full capture installations, the sizing of each full capture installation, the drainage areas addressed by these installations, and compliance with the applicable interim or final effluent limitation, in its TMDL Compliance Report. The Los Angeles Water Board will periodically audit sizing, performance, and other data to validate that a system satisfies the criteria established for a *full capture system* and any conditions established by the Regional Water Board Executive Officer in the certification.

(2) Reporting Compliance based on Partial Capture Systems and/or Institutional Controls:

(a) Using Performance Data Specific to the Permittee's Area: In its TMDL Compliance Report, a Permittee shall provide: (i) site-specific performance data for the applicable device(s); (ii) information on the number and location of such installations, and the drainage areas addressed by these installations; and (iii) calculated compliance with the applicable effluent limitations.

(b) Using Direct Measurement of Trash Discharge: Permittees shall provide an accounting of DGR and trash removal via street sweeping, catch basin clean outs, etc., in a database to facilitate the calculation of discharge for each rain event. The database shall be maintained and provided to the Regional Water Board for inspection upon request. In its TMDL Compliance Report, a Permittee shall provide information on its annual DGR, calculated storm year discharge, and compliance with the applicable effluent limitation.

(3) Reporting Compliance based on Combined Compliance Approaches:

Permittees shall provide the information specified in Part VI.E.5.c.i(1) for areas where *full capture systems* are installed and that are specified in Part VI.E.5.c.i(2)(a) or (b), as appropriate, for areas where *partial capture devices* and *institutional controls* are applied. In its TMDL Compliance Report, a Permittee shall also provide information on compliance with the applicable effluent limitation based on the combined compliance approaches.

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(4) Reporting Compliance based on an MFAC/BMP Approach:

The MFAC/BMP Program includes a Trash Monitoring and Reporting Plan, and a requirement that the responsible Permittees will self-report any non-compliance with its provisions. The results and report of the Trash Monitoring and Reporting Plan must be submitted to Regional Board with the Permittee’s Annual Report.

- ii. Violation of the reporting requirements of this Part shall be punishable pursuant to, inter alia, California Water Code section 13385, subdivisions (a)(3) and (h)(1), and/or section 13385.1.

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ATTACHMENT A – DEFINITIONS

The following are definitions for terms in this Order:

Adverse Impact

A detrimental effect upon water quality or beneficial uses caused by a discharge or loading of a pollutant or pollutants.

Anti-degradation Policies

Laws, policies and regulations set forth and state and federal statutes and regulations e.g., *Statement of Policy with Respect to Maintaining High Quality Water in California*, State Board Resolution No. 68-16; 40 CFR section 131.12.

Applicable Standards and Limitations

All State, interstate, and federal standards are limitations to which a “discharge” or a related activity is subject under the CWA, including effluent limitations, water quality standards, standards of performance, toxic effluent standards or prohibitions, “best management practices,” and pretreatment standards under sections 301, 302, 303, 304, 306, 307, 308, 403 and 404 of CWA.

Areas of Special Biological Significance (ASBS)

All those areas of this state as ASBS, listed specifically within the California Ocean Plan or so designated by the State Board which, among other areas, includes the area from Mugu Lagoon to Latigo Point: Oceanwater within a line originating from Laguna Point at 34° 5' 40" north, 119° 6'30" west, thence southeasterly following the mean high tideline to a point at Latigo Point defined by the intersection of the mean high tide line and a line extending due south of Benchmark 24; thence due south to a distance of 1000 feet offshore or to the 100 foot isobaths, whichever distance is greater; thence northwesterly following the 100 foot isobaths or maintaining a 1,000-foot distance from shore, whichever maintains the greater distance from shore, to a point lying due south of Laguna Point, thence due north to Laguna Point.

Arithmetic Mean ()

Also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

$$\text{Arithmetic mean} = \frac{\sum x}{n}$$

where:

$\sum x$ is the sum of the measured ambient water concentrations, and n is the number of samples.

Authorized Discharge

Any discharge that is authorized pursuant to an NPDES permit or meets the conditions set forth in this Order.

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Authorized Non-Storm Water Discharge

Authorized non-storm water discharges are discharges that are not composed entirely of storm water and that are either: (1) separately regulated by an individual or general NPDES permit and allowed to discharge to the MS4 when in compliance with all NPDES permit conditions; (2) authorized by USEPA⁵¹ pursuant to sections 104(a) or 104(b) of CERCLA that either (i) will comply with water quality standards as applicable or relevant and appropriate requirements ("ARARs") under section 121(d)(2) of CERCLA or (ii) are subject to (a) a written waiver of ARARs by USEPA pursuant to section 121(d)(4) of CERCLA or (b) a written determination by USEPA that compliance with ARARs is not practicable considering the exigencies of the situation, pursuant to 40 CFR section 300.415(j); or (3) necessary for emergency responses purposes, including flows from emergency fire fighting activities.

Automotive Service Facilities

A facility that is categorized in any one of the following Standard Industrial Classification (SIC) and North American Industry Classification System (NAICS) codes. For inspection purposes, Permittees need not inspect facilities with SIC codes 5013, 5014, 5541, 5511, provided that these facilities have no outside activities or materials that may be exposed to storm water.

Average Monthly Effluent Limitation (AMEL)

The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Bacteria Total Maximum Daily Load (TMDL) Dry Weather

Defined in the Bacteria TMDLs as those days with less than 0.1 inch of rainfall and those days occurring more than 3 days after a rain.

Bacteria Total Maximum Daily Load (TMDL) Wet Weather

Defined in the Bacteria TMDLs as a day with 0.1 inch or more of rain and 3 days following the rain event.

Baseline Waste Load Allocation

The Waste Load Allocation assigned to a Permittee before reductions are required. The progressive reductions in the Waste Load Allocations are based on a percentage of the Baseline Waste Load Allocation. The Baseline Waste Load Allocation for each jurisdiction was calculated based on the annual average amount of trash discharged to the storm drain system from a representative sampling of land use areas, as determined during the Baseline Monitoring Program. The Baseline Waste Load Allocations are incorporated into the Basin Plan at Table 7-2.2.

Basin Plan

The Water Quality Control Plan, Los Angeles Region, Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, adopted by the Regional Water Board on June 13, 1994 and subsequent amendments.

⁵¹ These typically include short-term, high volume discharges resulting from the development or redevelopment of groundwater extraction wells, or USEPA or State-required compliance testing of potable water treatment plants, as part of a USEPA authorized groundwater remediation action under CERCLA.

Beneficial Uses

The existing or potential uses of receiving waters in the permit area as designated by the Regional Water Board in the Basin Plan.

Best Management Practices (BMPs)

BMPs are practices or physical devices or systems designed to prevent or reduce pollutant loading from storm water or non-storm water discharges to receiving waters, or designed to reduce the volume of storm water or non-storm water discharged to the receiving water.

Bioaccumulative

Those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

Biofiltration

A LID BMP that reduces storm water pollutant discharges by intercepting rainfall on vegetative canopy, and through incidental infiltration and/or evapotranspiration, incidental infiltration, and filtration. As described in the *Ventura County Technical Guidance Manual*, studies have demonstrated that bioinfiltration of 1.5 times the storm water quality design volume (SWQDv) provides approximately equivalent or greater reductions in pollutant loading when compared to bioretention or infiltration of the SWQDv.⁵² Incidental infiltration is an important factor in achieving the required pollutant load reduction. Therefore, the term “biofiltration” as used in this Order is defined to include only systems designed to facilitate incidental infiltration or achieve the equivalent pollutant reduction as biofiltration BMPs with an underdrain (subject to Executive Officer approval). Biofiltration BMPs include bioretention systems with an underdrain and bioswales.

Bioretention

A LID BMP that reduces storm water runoff by intercepting rainfall on vegetative canopy, and through evapotranspiration and infiltration. The bioretention system typically includes a minimum 2-foot top layer of a specified soil and compost mixture underlain by a gravel-filled temporary storage pit dug into the *in-situ* soil. As defined in this Order, a bioretention BMP may be designed with an overflow drain, but may not include an underdrain. When a bioretention BMP is designed or constructed with an underdrain it is regulated in this Order as biofiltration.

Bioswale

A LID BMP consisting of a shallow channel lined with grass or other dense, low-growing vegetation. Bioswales are designed to collect storm water runoff and to achieve a uniform sheet flow through the dense vegetation for a period of several minutes.

Carcinogenic

Pollutants are substances that are known to cause cancer in living organisms.

⁵² Geosyntec Consultants and Larry Walker/Walker Associates. 2011. *Ventura County Technical Guidance Manual for Stormwater Quality and Control Measures, Manual Update 2011. Appendix D*. Prepared for the Ventura Countywide Stormwater Quality Management Program. July 13, 2011. pp. D-6 – D-15.

Coefficient of Variation (CV)

CV is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

Commercial Development

Any development on private land that is not heavy industrial or residential. The category includes, but is not limited to: hospitals, laboratories and other medical facilities, educational institutions, recreational facilities, plant nurseries, car wash facilities; mini-malls and other business complexes, shopping malls, hotels, office buildings, public warehouses and other light industrial complexes.

Commercial Malls

Any development on private land comprised of one or more buildings forming a complex of stores which sells various merchandise, with interconnecting walkways enabling visitors to easily walk from store to store, along with parking area(s). A commercial mall includes, but is not limited to: mini-malls, strip malls, other retail complexes, and enclosed shopping malls or shopping centers.

Conditionally Exempt Essential Non-Storm Water Discharge

Conditionally exempt essential non-storm water discharges are certain categories of discharges that are not composed entirely of storm water and that are allowed by the Regional Water Board to discharge to the MS4, if in compliance with all specified requirements; are not otherwise regulated by an individual or general NPDES permit; and are essential public services that are directly or indirectly required by other State or federal statute and/or regulation. These include non-storm water discharges from potable water sources and non-emergency fire fighting activities. Conditionally exempt essential non-storm water discharges may contain minimal amounts of pollutants, however, when in compliance with industry standard BMPs and control measures, do not result in significant environmental effects. (See 55 Fed. Reg. 47990, 47995 (Nov. 16, 1990)).

Conditionally Exempt Non-Storm Water Discharge

Conditionally exempt non-storm water discharges are certain categories of discharges that are not composed entirely of storm water and that are either not sources of pollutants or may contain only minimal amounts of pollutants and when in compliance with specified BMPs do not result in significant environmental effects. (See 55 Fed. Reg. 47990, 47995 (Nov. 16, 1990)).

Construction

Any development on private land that is not heavy industrial or residential. The category includes, but is not limited to: hospitals, laboratories and other medical facilities, educational institutions, recreational facilities, plant nurseries, car wash facilities, mini-malls and other

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business complexes, shopping malls, hotels, office buildings, public warehouses and other light industrial complexes.

Control

To minimize, reduce, eliminate, or prohibit by technological, legal, contractual or other means, the discharge of pollutants from an activity or activities.

Daily Discharge

Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

Daily Generation Rate (DGR)

The estimated amount of trash deposited within a representative drainage area during a 24-hour period, derived from the amount of trash collected from streets and catch basins in the area over a 30-day period.

Dechlorinated/Debrominated Swimming Pool Discharge

Swimming pool discharges which have no measurable chlorine or bromine and do not contain any detergents, wastes, or additional chemicals not typically found in swimming pool water. The term does not include swimming pool filter backwash.

Detected, but Not Quantified (DNQ)

DNQ are those sample results less than the RL, but greater than or equal to the laboratory's MDL.

Development

Any construction, rehabilitation, redevelopment or reconstruction of any public or private residential project (whether single-family, multi-unit or planned unit development); industrial, commercial, retail and other non-residential projects, including public agency projects; or mass grading for future construction. It does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of facility, nor does it include emergency construction activities required to immediately protect public health and safety

Dilution Credit

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Dilution Credit is the amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.

Directly Adjacent

Situated within 200 feet of the contiguous zone required for the continued maintenance, function, and structural stability of the environmentally sensitive area.

Director

The Director of a municipality and Person(s) designated by and under the Director's instruction and supervision.

Discharge

When used without qualification the "discharge of a pollutant."

Discharging Directly

Outflow from a drainage conveyance system that is composed entirely or predominantly of flows from the subject, property, development, subdivision, or industrial facility, and not commingled with the flows from adjacent lands.

Discharge of a Pollutant

Any addition of any "pollutant" or combination of pollutants to "waters of the United States" from any "point source" or, any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation. The term discharge includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works.

Disturbed Area

An area that is altered as a result of clearing, grading, and/or excavation.

Effective Impervious Area (EIA)

EIA is the portion of the surface area that is hydrologically connected to a drainage system via a hardened conveyance or impervious surface without any intervening median to mitigate the flow volume.

Effluent Concentration Allowance (ECA)

ECA is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

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Effluent Limitation

Any restriction imposed on quantities, discharge rates, and concentrations of pollutants, which are discharged from point sources to waters of the U.S. (40 CFR § 122.2).

Enclosed Bays

Enclosed Bays means indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

Environmentally Sensitive Areas (ESAs)

An area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which would be easily disturbed or degraded by human activities and developments (California Public Resources Code § 30107.5). Areas subject to storm water mitigation requirements are: areas designated as Significant Ecological Areas by the County of Los Angeles (Los Angeles County Significant Areas Study, Los Angeles County Department of Regional Planning (1976) and amendments); an area designated as a Significant Natural Area by the California Department of Fish and Game's Significant Natural Areas Program, provided that area has been field verified by the Department of Fish and Game; an area listed in the Basin Plan as supporting the "Rare, Threatened, or Endangered Species (RARE)" beneficial use; and an area identified by a Permittee as environmentally sensitive.

Estimated Chemical Concentration

The estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

Estuaries

Estuaries means waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in California Water Code section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

Existing Discharger

Any discharger that is not a new discharger. An existing discharger includes an "increasing discharger" (i.e., any existing facility with treatment systems in place for its current discharge that is or will be expanding, upgrading, or modifying its permitted discharge after the effective date of this Order).

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Flow-through treatment BMPs

Flow-through treatment BMPs include modular, vault type “high flow biotreatment” devices contained within an impervious vault with an underdrain or designed with an impervious liner and an underdrain.

Full Capture System

Any single device or series of devices, certified by the Executive Officer, that traps all particles retained by a 5 mm mesh screen and has a design treatment capacity of not less than the peak flow rate Q resulting from a one-year, one-hour storm in the sub-drainage area. The Rational Equation is used to compute the peak flow rate:

$$Q = C \times I \times A,$$

Where:

Q = design flow rate (cubic feet per second, cfs);

C = runoff coefficient (dimensionless);

I = design rainfall intensity (inches per hour, as determined per the Los Angeles County rainfall isohyetal maps relevant to the Los Angeles River watershed), and

A = sub-drainage area (acres).

General Construction Activities Storm Water Permit (GCASP)

The general NPDES permit adopted by the State Board which authorizes the discharge of storm water from construction activities under certain conditions.

General Industrial Activities Storm Water Permit (GIASP)

The general NPDES permit adopted by the State Board which authorizes the discharge of storm water from certain industrial activities under certain conditions.

Green Roof

A LID BMP using planter boxes and vegetation to intercept rainfall on the roof surface. Rainfall is intercepted by vegetation leaves and through evapotranspiration. Green roofs may be designed as either a bioretention BMP or as a ~~planter box flow-through treatment~~ biofiltration BMP. To receive credit as a bioretention BMP, the green roof system planting medium shall be of sufficient depth to provide capacity within the pore space volume to contain the design storm depth and may not be designed or constructed with an underdrain.

Hillside

Property located in an area with known erosive soil conditions, where the development contemplates grading on any natural slope that is 25% or greater and where grading contemplates cut or fill slopes.

Illicit Connection

Any man-made conveyance that is connected to the storm drain system without a permit, excluding roof drains and other similar type connections. Examples include channels, pipelines, conduits, inlets, or outlets that are connected directly to the storm drain system.

Illicit DischargeR
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Any discharge into the MS4 or from the MS4 into a receiving water that is prohibited under local, state, or federal statutes, ordinances, codes, or regulations. The term illicit discharge includes any non-storm water discharge, except authorized non-storm water discharges; conditionally exempt non-storm water discharges; and non-storm water discharges resulting from natural flows specifically identified in Part III.A.1.d.

Illicit Disposal

Any disposal, either intentionally or unintentionally, of material(s) or waste(s) that can pollute storm water.

Improved drainage system

An improved drainage system is a drainage system that has been channelized or armored. The clearing or dredging of a natural drainage system does not cause the system to be classified as an improved drainage system.

Industrial/Commercial Facility

Any facility involved and/or used in the production, manufacture, storage, transportation, distribution, exchange or sale of goods and/or commodities, and any facility involved and/or used in providing professional and non-professional services. This category of facilities includes, but is not limited to, any facility defined by either the Standard Industrial Classifications (SIC) or the North American Industry Classification System (NAICS). Facility ownership (federal, state, municipal, private) and profit motive of the facility are not factors in this definition.

Industrial Activities Storm Water General Permit (IASGP)

The general NPDES permit adopted by the State Water Board, which authorizes the discharge of storm water from certain industrial activities under certain conditions.

Industrial Park

A land development that is set aside for industrial development. Industrial parks are usually located close to transport facilities, especially where more than one transport modalities coincide: highways, railroads, airports, and navigable rivers. It includes office parks, which have offices and light industry.

Infiltration BMP

A LID BMP that reduces storm water runoff by capturing and infiltrating the runoff into in-situ soils or amended on-site soils. Examples of infiltration BMPs include infiltration basins, dry wells, and pervious pavement.⁵³

Inland Surface Waters

All surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

⁵³ Some types of infiltration BMPs such as dry wells, may meet the definition of a Class V, deep well injection facility and may be subject to permitting under U.S. EPA requirements.

Inspection

Entry and the conduct of an on-site review of a facility and its operations, at reasonable times, to determine compliance with specific municipal or other legal requirements. The steps involved in performing an inspection, include, but are not limited to:

1. Pre-inspection documentation research.;
2. Request for entry;
3. Interview of facility personnel;
4. Facility walk-through.
5. Visual observation of the condition of facility premises;
6. Examination and copying of records as required;
7. Sample collection (if necessary or required);
8. Exit conference (to discuss preliminary evaluation); and,
9. Report preparation, and if appropriate, recommendations for coming into compliance.

In the case of restaurants, a Permittee may conduct an inspection from the curbside, provided that such "curbside" inspection provides the Permittee with adequate information to determine an operator's compliance with BMPs that must be implemented per requirements of this Order, Regional Board Resolution 98-08, County and municipal ordinances, and the SQMP.

Instantaneous Maximum Effluent Limitation

The highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation

The lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

Institutional Controls

Programmatic trash control measures that do not require construction or structural modifications to the MS4. Examples include street sweeping, public education, and clean out of catch basins that discharge to storm drains.

[Integrated Pest Management \(IPM\)](#) is an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as [biological control](#), [habitat manipulation](#), [modification of cultural practices](#), and [use of resistant varieties](#).

Large Municipal Separate Storm Sewer System (MS4)

All MS4s that serve a population greater than 250,000 (1990 Census) as defined in 40 CFR 122.26 (b)(4). The Regional Board designated Los Angeles County as a large MS4 in 1990, based on: (i) the U.S. Census Bureau 1990 population count of 8.9 million, and (ii) the interconnectivity of the MS4s in the incorporated and unincorporated areas within the County.

Local SWPPP

The Storm Water Pollution Prevention Plan required by the local agency for a project that disturbs one or more acres of land.

Low Impact Development (LID)

LID consists of building and landscape features designed to retain or filter storm water runoff.

Major Outfall

Major municipal separate storm sewer outfall (or “major outfall”) means a municipal separate storm sewer outfall that discharges from a single pipe with an inside diameter of 36 inches or more or its equivalent (discharge from a single conveyance other than circular pipe which is associated with a drainage area of more than 50 acres); or for municipal separate storm sewers that receive storm water from lands zoned for industrial activity (based on comprehensive zoning plans or the equivalent), an outfall that discharges from a single pipe with an inside diameter of 12 inches or more or from its equivalent (discharge from other than a circular pipe associated with a drainage area of 2 acres or more). (40 CFR § 122.26(b)(5))

Maximum Daily Effluent Limitation (MDEL)

The highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Maximum Extent Practicable (MEP)

In selecting BMPs which will achieve MEP, it is important to remember that municipalities will be responsible to reduce the discharge of pollutants in storm water to the maximum extent practicable. This means choosing effective BMPs, and rejecting applicable BMPs only where other effective BMPs will serve the same purpose, the BMPs would not be technically feasible, or the cost would be prohibitive. The following factors may be useful to consider:

1. Effectiveness: Will the BMP address a pollutant of concern?
2. Regulatory Compliance: Is the EMP in compliance with storm water regulations as well as other environmental regulations?
3. Public acceptance: Does the BMP have public support?
4. Cost: Will the cost of implementing the BMP have a reasonable relationship to the pollution control benefits to be achieved?
5. Technical Feasibility: Is the BMP technically feasible considering soils, geography, water resources, etc.?

After selecting a menu of BMPs, it is of course the responsibility of the discharger to insure that all BMPs are implemented.

Median

The middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, then the median = $X_{(n+1)/2}$. If n is even, then the median = $(X_{n/2} + X_{(n/2)+1})/2$ (i.e., the midpoint between the $n/2$ and $n/2+1$).

Method Detection Limit (MDL)

MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in 40 CFR Part 136, Attachment B (revised as of July 3, 1999).

Minimum Level (ML)

ML is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Mixing Zone

Mixing Zone is a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

Municipal Separate Storm Sewer System (MS4)

A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

(i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;

(ii) Designed or used for collecting or conveying storm water;

(iii) Which is not a combined sewer; and

(iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR § 122.2.

(40 CFR § 122.26(b)(8))

National Pollutant Discharge Elimination System (NPDES)

The national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under CWA §307, 402, 318, and 405. The term includes an “approved program.”

Natural Drainage System

A natural drainage system is a drainage system that has not been improved (e.g., channelized or armored). The clearing or dredging of a natural drainage system does not cause the system to be classified as an improved drainage system.

New Development

Land disturbing activities; structural development, including construction or installation of a building or structure, creation of impervious surfaces; and land subdivision.

Non-Storm Water Discharge

Any discharge into the MS4 or from the MS4 into a receiving water that is not composed entirely of storm water.

Not Detected (ND)

Sample results which are less than the laboratory's MDL.

Nuisance

Anything that meets all of the following requirements: (1) is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property; (2) affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.; (3) occurs during, or as a result of, the treatment or disposal of wastes.

Ocean Waters

The territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. Discharges to ocean waters are regulated in accordance with the State Water Board's California Ocean Plan.

Outfall

A point source as defined by 40 CFR 122.2 at the point where a municipal separate storm sewer discharges to waters of the United States and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances with connect segments of the same stream or other waters of the United States and are used to convey waters of the United States. (40 CFR § 122.26(b)(9))

Parking Lot

Land area or facility for the parking or storage of motor vehicles used for businesses, commerce, industry, or personal use, with a lot size of 5,000 square feet or more of surface area, or with 25 or more parking spaces.

Partial Capture Device

Any structural trash control device that has not been certified by the Executive Officer as meeting the "full capture" performance requirements.

Permittee(s)

Co-Permittees and any agency named in this Order as being responsible for permit conditions within its jurisdiction. Permittees to this Order include the Los Angeles County Flood Control District, Los Angeles County, and the cities of Agoura Hills, Alhambra, Arcadia, Artesia, Azusa, Baldwin Park, Bellflower, Bell Gardens, Beverly Hills, Bradbury, Burbank, Calabasas, Carson, Cerritos, Claremont, Commerce, Compton, Covina, Cudahy, Culver City, Diamond Bar, Downey, Duarte, El Monte, El Segundo, Gardena, Glendale, Glendora, Hawaiian Gardens, Hawthorne, Hermosa Beach, Hidden Hills, Huntington Park, Industry, Inglewood, Irwindale, La Canada Flintridge, La Habra Heights, Lakewood, La Mirada, La Puente, La Verne, Lawndale, Lomita, Los Angeles, Lynwood, Malibu, Manhattan Beach, Maywood, Monrovia, Montebello, Monterey Park, Norwalk, Palos Verdes Estates, Paramount, Pasadena, Pico Rivera, Pomona, Rancho Palos Verdes, Redondo Beach, Rolling Hills, Rolling Hills Estates, Rosemead, San Dimas, San Fernando, San Gabriel, San Marino, Santa Clarita, Santa Fe Springs, Santa

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Monica, Sierra Madre, Signal Hill, South El Monte, South Gate, South Pasadena, Temple City, Torrance, Vernon, Walnut, West Covina, West Hollywood, Westlake Village, and Whittier.

Persistent Pollutants

Persistent pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

Planning Priority Projects

Those projects that are required to incorporate appropriate storm water mitigation measures into the design plan for their respective project. These types of projects include:

1. Ten or more unit homes (includes single family homes, multifamily homes, condominiums, and apartments)
2. A 100,000 or more square feet of impervious surface area industrial/ commercial development (1 ac starting March 2003)
3. Automotive service facilities (SIC 5013, 5014, 5541, 7532-7534, and 7536-7539)
4. Retail gasoline outlets
5. Restaurants (SIC 5812)
6. Parking lots 5,000 square feet or more of surface area or with 25 or more parking spaces
7. Redevelopment projects in subject categories that meet Redevelopment thresholds
8. Projects located in or directly adjacent to or discharging directly to an ESA, which meet thresholds; and
9. Those projects that require the implementation of a site-specific plan to mitigate post-development storm water for new development not requiring a SUSMP but which may potentially have adverse impacts on post-development storm water quality, where the following project characteristics exist:
 - a) Vehicle or equipment fueling areas;
 - b) Vehicle or equipment maintenance areas, including washing and repair;
 - c) Commercial or industrial waste handling or storage;
 - d) Outdoor handling or storage of hazardous materials;
 - e) Outdoor manufacturing areas;
 - f) Outdoor food handling or processing;
 - g) Outdoor animal care, confinement, or slaughter; or
- h) Outdoor horticulture activities.

~~**Planter boxes and other flow-through treatment BMPs**~~

~~Planter boxes and other flow-through treatment BMPs include modular, vault type planter boxes or “high flow biotreatment” devices contained within an impervious vault with an underdrain or designed with an impervious liner and an underdrain. Planter boxes do not allow for incidental infiltration and therefore do not meet the requirements for biofiltration as defined in this Order. However, planter boxes may be used to meet the Water Quality Mitigation Criteria as specified in Part VI.D.6.c.iv of this Order.~~

Point Source

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Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff. (40 CFR § 122.2)

Pollutant Minimization Program (PMP)

PMP means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to California Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

Pollutants

Those "pollutants" defined in CWA §502(6) (33.U.S.C.§1362(6)), and incorporated by reference into California Water Code §13373

Pollution Prevention

Pollution Prevention means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in California Water Code Section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State or Regional Water Board.

Potable Water _____

Water that meets the drinking water standards of the US Environmental Protection Agency.

Potable Water Distribution Systems Releases

Sources of flows from drinking water storage, supply and distribution systems including flows from system failures, pressure releases, system maintenance, distribution line testing, fire hydrant flow testing; and flushing and dewatering of pipes, reservoirs, vaults, and minor non-invasive well maintenance activities not involving chemical addition(s). It does not include wastewater discharges from activities that occur at wellheads, such as well construction, well development (i.e., aquifer pumping tests, well purging, etc.), or major well maintenance.

Project

All development, redevelopment, and land disturbing activities. The term is not limited to "Project" as defined under CEQA (Pub. Resources Code §21065).

Rain Event

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Any rain event greater than 0.1 inch in 24 hours except where specifically stated otherwise

Rainfall Harvest and Use

Rainfall harvest and use is an LID BMP system designed to capture runoff, typically from a roof but can also include runoff capture from elsewhere within the site, and to provide for temporary storage until the harvested water can be used for irrigation or non-potable uses. The harvested water may also be used for potable water uses if the system includes disinfection treatment and is approved for such use by the local building department.

Rare, Threatened, or Endangered Species (RARE)

A beneficial use for waterbodies in the Los Angeles Region, as designated in the Basin Plan (Table 2-1), that supports habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened, or endangered

Receiving Water

A "water of the United States" into which waste and/or pollutants are or may be discharged.

Receiving Water Limitation

Any applicable numeric or narrative water quality objective or criterion, or limitation to implement the applicable water quality objective or criterion, for the receiving water as contained in Chapter 3 or 7 of the Water Quality Control Plan for the Los Angeles Region (Basin Plan), water quality control plans or policies adopted by the State Water Board, or federal regulations, including but not limited to, 40 CFR § 131.38.

Redevelopment

Land-disturbing activity that results in the creation, addition, or replacement of 5,000 square feet or more of impervious surface area on an already developed site. Redevelopment includes, but is not limited to: the expansion of a building footprint; addition or replacement of a structure; replacement of impervious surface area that is not part of a routine maintenance activity; and land disturbing activities related to structural or impervious surfaces. It does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of facility, nor does it include emergency construction activities required to immediately protect public health and safety.

Regional Administrator

The Regional Administrator of the Regional Office of the USEPA or the authorized representative of the Regional Administrator.

Reporting Level (RL)

RL is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from Appendix 4 of the SIP in accordance with Section 2.4.2 of the SIP or established in accordance with Section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in

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cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Residual Water

In the context of this Order, water remaining in a structural BMP subsequent to the drawdown or drainage period. The residual water typically contains high concentration(s) of pollutants.

Restaurant

A facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC Code 5812).

Retail Gasoline Outlet

Any facility engaged in selling gasoline and lubricating oils.

Runoff

Any runoff including storm water and dry weather flows from a drainage area that reaches a receiving water body or subsurface. During dry weather it is typically comprised of base flow either contaminated with pollutants or uncontaminated, and nuisance flows.

Satellite Collection System

The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.

Screening

Using proactive methods to identify illicit connections through a continuously narrowing process. The methods may include: performing baseline monitoring of open channels, conducting special investigations using a prioritization approach, analyzing maintenance records for catch basin and storm drain cleaning and operation, and verifying all permitted connections into the storm drains. Special investigation techniques may include: dye testing, visual inspection, smoke testing, flow monitoring, infrared, aerial and thermal photography, and remote control camera operation.

Sidewalk Rinsing

Means pressure washing of paved pedestrian walkways with average water usage of 0.006 gallons per square foot, with no cleaning agents, and properly disposing of all debris collected, as authorized under Regional Board Resolution No. 98-08.

Significant Ecological Areas (SEAs)

~~Areas designated by the Los Angeles County Board of Supervisors in 1981 with the adoption of the General Plan. The collection of SEAs together was intended to designate critical components of the biodiversity of Los Angeles County as it was known and understood at that time.~~

An area that is determined to possess an example of biotic resources that cumulatively represent biological diversity, for the purposes of protecting biotic diversity, as part of the Los Angeles County General Plan.

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Areas are designated as SEAs, if they possess one or more of the following criteria:

1. The habitat of rare, endangered, and threatened plant and animal species.
2. Biotic communities, vegetative associations, and habitat of plant and animal species that are either one of a kind, or are restricted in distribution on a regional basis.
3. Biotic communities, vegetative associations, and habitat of plant and animal species that are either one of a kind or are restricted in distribution in Los Angeles County.
4. Habitat that at some point in the life cycle of a species or group of species, serves as a concentrated breeding, feeding, resting, migrating grounds and is limited in availability either regionally or within Los Angeles County.
5. Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent an unusual variation in a population or community.
6. Areas important as game species habitat or as fisheries.
7. Areas that would provide for the preservation of relatively undisturbed examples of natural biotic communities in Los Angeles County.
8. Special areas.

Significant Natural Area (SNA)

An area defined by the California Department of Fish and Game (DFG), Significant Natural Areas Program, as an area that contains an important example of California's biological diversity. The most current SNA maps, reports, and descriptions can be downloaded from the DFG website at <ftp://maphost.dfg.ca.gov/outgoing/whdab/sna/>. These areas are identified using the following biological criteria only, irrespective of any administrative or jurisdictional considerations:

1. Areas supporting extremely rare species or habitats.
2. Areas supporting associations or concentrations of rare species or habitats.
3. Areas exhibiting the best examples of rare species and habitats in the state

Site

The land or water area where any "facility or activity" is physically located or conducted, including adjacent land used in connection with the facility or activity.

Source Control BMP

Any schedules of activities, prohibitions of practices, maintenance procedures, managerial practices or operational practices that aim to prevent storm water pollution by reducing the potential for contamination at the source of pollution.

Source of Drinking Water

Any water designated as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan.

SQMP

The Los Angeles Countywide Stormwater Quality Management Program.

Standard Deviation (Σ)

Standard Deviation is a measure of variability that is calculated as follows:

$$\Sigma = (\Sigma[(x - \bar{x})^2]/(n - 1))^{0.5}$$

where:

x is the observed value;

\bar{x} is the arithmetic mean of the observed values; and

n is the number of samples.

State Storm Water Pollution Prevention Plan (State SWPPP)

A plan, as required by a State General Permit, identifying potential pollutant sources and describing the design, placement and implementation of BMPs, to effectively prevent non-stormwater Discharges and reduce Pollutants in Stormwater Discharges during activities covered by the General Permit.

Storm Water

Storm water runoff, snow melt runoff, and surface runoff and drainage related to precipitation events (pursuant to 40 CFR § 122.26(b)(13); 55 Fed. Reg. 47990, 47995 (Nov. 16, 1990)).

Storm Water Discharge Associated with Industrial Activity

Industrial discharge as defined in 40 CFR 122.26(b)(14).

Stormwater Quality Management Program

The Los Angeles Countywide Stormwater Quality Management Program, which includes descriptions of programs, collectively developed by the Permittees in accordance with provisions of the NPDES Permit, to comply with applicable federal and state law, as the same is amended from time to time.

Structural BMP

Any structural facility designed and constructed to mitigate the adverse impacts of storm water and urban runoff pollution (e.g. canopy, structural enclosure). The category may include both Treatment Control BMPs and Source Control BMPs.

SUSMP

The Los Angeles Countywide Standard Urban Stormwater Mitigation Plan. The SUSMP shall address conditions and requirements of new development.

Total Maximum Daily Load (TMDL)

The sum of the individual waste load allocations for point sources and load allocations for nonpoint sources and natural background.

Toxicity Identification Evaluation (TIE)

A set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.

Toxicity Reduction Evaluation (TRE)

TRE is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an

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evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

Trash Excluders

Any structural trash control device that prevents the discharge of trash to the storm drain system or to receiving waters. A trash exclude may or may not be certified by the Executive Officer as meeting the “full capture” performance requirements.

Treatment

The application of engineered systems that use physical, chemical, or biological processes to remove pollutants. Such processes include, but are not limited to, filtration, gravity settling, media absorption, biodegradation, biological uptake, chemical oxidation and UV radiation.

Treatment Control BMP

Any engineered system designed to remove pollutants by simple gravity settling of particulate pollutants, filtration, biological uptake, media absorption or any other physical, biological, or chemical process.

Unconfined ground water infiltration

Water other than waste water that enters the MS4 (including foundation drains) from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow. (See 40 CFR § 35.2005(20).)

Uncontaminated Ground Water Infiltration

Water other than waste water that enters the MS4 (including foundation drains) from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow. (See 40 CFR § 35.2005(20).)

USEPA Phase I Facilities

Facilities in specified industrial categories that are required to obtain an NPDES permit for storm water discharges, as required by 40 CFR 122.26(c). These categories include:

- i. facilities subject to storm water effluent limitation guidelines, new source performance standards, or toxic pollutant effluent standards (40 CFR N)
- ii. manufacturing facilities
- iii. oil and gas/mining facilities
- iv. hazardous waste treatment, storage, or disposal facilities
- v. landfills, land application sites, and open dumps
- vi. recycling facilities
- vii. steam electric power generating facilities
- viii. transportation facilities
- ix. sewage of wastewater treatment works
- x. light manufacturing facilities

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Vehicle Maintenance/Material Storage Facilities/Corporation Yards

Any Permittee owned or operated facility or portion thereof that:

- i. Conducts industrial activity, operates equipment, handles materials, and provides services similar to Federal Phase I facilities;
- ii. Performs fleet vehicle service/maintenance on ten or more vehicles per day including repair, maintenance, washing, and fueling;
- iii. Performs maintenance and/or repair of heavy industrial machinery/equipment; and
- iv. Stores chemicals, raw materials, or waste materials in quantities that require a hazardous materials business plan or a Spill Prevention, Control, and Countermeasures (SPCC) plan.

Water Quality-based Effluent Limitation

Any restriction imposed on quantities, discharge rates, and concentrations of pollutants, which are discharged from point sources to waters of the U.S. necessary to achieve a water quality standard.

Waters of the State

Any surface water or groundwater, including saline waters, within the boundaries of the state.

Waters of the United States or Waters of the U.S.

- a. All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- b. All interstate waters, including interstate "wetlands";
- c. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
 1. Which are or could be used by interstate or foreign travelers for recreational or other purposes;
 2. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 3. Which are used or could be used for industrial purposes by industries in interstate commerce;

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- d. All impoundments of waters otherwise defined as waters of the United States under this definition;
- e. Tributaries of waters identified in paragraphs (a) through (d) of this definition;
- f. The territorial sea; and
- g. “Wetlands” adjacent to waters (other than waters that are themselves wetlands) identified in paragraph (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR section 423.22(m), which also meet the criteria of this definition) are not waters of the United States. This exclusion applies only to man-made bodies of water, which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area’s status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with USEPA.

Wet Season

The calendar period beginning October 1 through April 15.

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ACRONYMS AND ABBREVIATIONS

AMEL	Average Monthly Effluent Limitation
ASBS	Areas of Special Biological Significance
B	Background Concentration
BAT	Best Available Technology Economically Achievable
Basin Plan	<i>Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties</i>
BCT	Best Conventional Pollutant Control Technology
BMP	Best Management Practices
BMPP	Best Management Practices Plan
BPJ	Best Professional Judgment
BOD	Biochemical Oxygen Demand 5-day @ 20 °C
BPT	Best Practicable Treatment Control Technology
C	Water Quality Objective
CCR	California Code of Regulations
CEEIN	California Environmental Education Interagency Network
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CTR	California Toxics Rule
CV	Coefficient of Variation
CWA	Clean Water Act
CWC	California Water Code
Discharger	Los Angeles County MS4 Permittees
DMR	Discharge Monitoring Report
DNQ	Detected But Not Quantified
ELAP	California Department of Public Health Environmental Laboratory Accreditation Program
ELG	Effluent Limitations, Guidelines and Standards
Ep	Erosion potential
ESCP	Erosion and Sediment Control Plan
Facility	Los Angeles County MS4s
GIS	Geographical Information System
gpd	gallons per day
IC	Inhibition Coefficient
IC ₁₅	Concentration at which the organism is 15% inhibited
IC ₂₅	Concentration at which the organism is 25% inhibited
IC ₄₀	Concentration at which the organism is 40% inhibited
IC ₅₀	Concentration at which the organism is 50% inhibited
IC/ID	Illicit Connection and Illicit Discharge Elimination
IPM	Integrated Pest Management
LA	Load Allocations
LID	Low Impact Development
LOEC	Lowest Observed Effect Concentration
LUPs	Linear Underground/Overhead Projects
µg/L	micrograms per Liter
MCM	Minimum Control Measure

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mg/L	milligrams per Liter
MDEL	Maximum Daily Effluent Limitation
MEC	Maximum Effluent Concentration
MGD	Million Gallons Per Day
ML	Minimum Level
MRP	Monitoring and Reporting Program
MS4	Municipal Separate Storm Sewer System
NAICS	North American Industry Classification System
ND	Not Detected
NOEC	No Observable Effect Concentration
NPDES	National Pollutant Discharge Elimination System
NSPS	New Source Performance Standards
NTR	National Toxics Rule
OAL	Office of Administrative Law
PIPP	Public Information and Participation Program
PMP	Pollutant Minimization Plan
POTW	Publicly Owned Treatment Works
QA	Quality Assurance
QA/QC	Quality Assurance/Quality Control
QSD	Qualified SWPPP Developer
QSP	Qualified SWPPP Practitioner
Ocean Plan	<i>Water Quality Control Plan for Ocean Waters of California</i>
RAP	Reasonable Assurance Program
REAP	Rain Event Action Plan
Regional Water Board	California Regional Water Quality Control Board, Los Angeles Region
RGOs	Retail Gasoline Outlets
RPA	Reasonable Potential Analysis
SCP	Spill Contingency Plan
SEA	Significant Ecological Area
SIC	Standard Industrial Classification
SIP	State Implementation Policy (<i>Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California</i>)
SMR	Self Monitoring Reports
State Water Board	California State Water Resources Control Board
SWPPP	Storm Water Pollution Prevention Plan
SWQDv	Storm Water Quality Design Volume
SWQPA	State Water Quality Protected Area
TAC	Test Acceptability Criteria
Thermal Plan	<i>Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California</i>
TIE	Toxicity Identification Evaluation
TMDL	Total Maximum Daily Load
TOC	Total Organic Carbon
TRE	Toxicity Reduction Evaluation

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TSD	Technical Support Document
TSS	Total Suspended Solid
TU _c	Chronic Toxicity Unit
USEPA	United States Environmental Protection Agency
WDR	Waste Discharge Requirements
WDID	Waste Discharge Identification
WET	Whole Effluent Toxicity
WLA	Waste Load Allocations
WMA	Watershed Management Area
WQBELs	Water Quality-Based Effluent Limitations
WQS	Water Quality Standards
%	Percent

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

LOS ANGELES REGION

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576 - 6600 • Fax (213) 576 - 6640
<http://www.waterboards.ca.gov/losangeles>

MONITORING AND REPORTING PROGRAM - No. TBD

FOR

**ORDER R4-2012-XXXX
NPDES PERMIT NO. CAS004001**

**WASTE DISCHARGE REQUIREMENTS
FOR MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) DISCHARGES
WITHIN THE COASTAL WATERSHEDS OF LOS ANGELES COUNTY FLOOD
CONTROL DISTRICT, INCLUDING THE COUNTY OF LOS ANGELES, AND THE
INCORPORATED CITIES THEREIN, EXCEPT THOSE DISCHARGES ORIGINATING
FROM THE CITY OF LONG BEACH MS4**

Month Date, 2012

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I. MONITORING AND REPORTING PROGRAM (MRP)

Section 308(a) of the federal Clean Water Act and Sections 122.41(h), (i)-(l), 122.44(i), and 122.48 of Title 40 of the Code of Federal Regulations requires that all National Pollutant Discharge Elimination System (NPDES) permits specify monitoring and reporting requirements. Federal regulations applicable to large and medium MS4s also specify additional monitoring and reporting requirements. (40 C.F.R. §§ 122.26(d)(2)(i)(F) & (d)(2)(iii)(D), 122.42(c).) California Water Code sections 13267 and 13383 further authorize the California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board) to establish monitoring, inspection, entry, reporting, and recordkeeping requirements require technical and monitoring reports. This MRP establishes monitoring, and reporting, and recordkeeping requirements that implement the federal and California laws and/or regulations.

II. PURPOSE AND SCOPE**A. Primary Objectives**

The primary objectives of the Monitoring Program are to:

1. Assess the chemical, physical, and biological impacts of discharges from the municipal storm water sewer system (MS4) on receiving waters.
2. Assess compliance with receiving water limitations and water quality-based effluent limitations (WQBELs) established to implement Total Maximum Daily Load (TMDL) wet weather and dry weather wasteload allocations (WLAs).
3. Characterize pollutant loads in MS4 discharges.
4. Identify sources of pollutants in MS4 discharges.
5. Measure and improve the effectiveness of pollutant controls implemented under this Order.

B. Purpose

The results of the monitoring requirements outlined below shall be used to refine control measures for the reduction of pollutant loading and the protection and enhancement of the beneficial uses of the receiving waters in Los Angeles County.

C. Provision for Integrated Approach

The Monitoring Program provides flexibility to allow Permittees to develop an integrated monitoring program to address all of the monitoring requirements of this Order and other monitoring obligations or requirements in a cost efficient and effective manner.

D. Provision for a Coordinated Integrated Approach

The Monitoring Program provides flexibility to allow Permittees to coordinate monitoring efforts on a watershed or subwatershed basis to leverage monitoring resources in an effort to increase cost-efficiency and effectiveness and to closely

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align monitoring with TMDL monitoring requirements and Watershed Management Programs.

E. Monitoring Program Elements

The Monitoring Program shall include the following elements:

1. **Receiving water monitoring** shall be performed at previously designated mass emission stations and/or at TMDL receiving water compliance points, as designated in Regional Water Board Executive Officer approved TMDL ~~Coordinated Monitoring Plans (CMPs)~~ Monitoring Plans (see Table E-1 for a list of approved TMDL ~~CMPs~~ Monitoring Plans). The objectives of the receiving water monitoring include the following:
 - a. Determine whether the receiving water limitations are being achieved,
 - b. Assess trends in pollutant concentrations over time, or during specified conditions,
 - c. Determine whether the designated beneficial uses are fully supported as determined by water chemistry, as well as aquatic toxicity and bioassessment monitoring.
2. **Storm water outfall based monitoring**; including TMDL monitoring requirements specified in approved TMDL ~~CMPs~~ Monitoring Plans (see Table E-1). The objectives of the storm water outfall based monitoring program include the following:
 - a. Determine the quality of a Permittee's discharge relative to municipal action levels, as described in Attachment G of this Order,
 - b. Determine whether a Permittee's discharge is in compliance with applicable ~~wet weather~~ storm water WQBELs derived from TMDL WLAs,
 - c. Determine whether a Permittee's discharge causes or contributes to an exceedance of receiving water limitations.
3. **Non-storm water outfall based monitoring**; including TMDL monitoring requirements specified in approved TMDL ~~CMPs~~ Monitoring Plans (see Table E-1). The objectives of the non-storm water outfall based monitoring program include the following:
 - a. Determine whether a Permittee's discharge is in compliance with applicable ~~dry weather~~ non-storm water WQBELs derived from TMDL WLAs,
 - b. Determine whether a Permittee's discharge exceeds non-storm water action levels, as described in Attachment G of this Order,
 - c. Determine whether a Permittee's discharge contributes to or causes an exceedance of receiving water limitations,
 - d. Assist a Permittee in identifying illicit discharges as described in Part VI.D.9-10 of this Order.

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- 4. New Development/Re-development effectiveness ~~monitoring~~ tracking.**
The objectives of best management practices (BMP) effectiveness ~~monitoring~~ tracking is to ~~determine~~ track whether the conditions in the building permit issued by the Permittee are implemented to ensure the volume of storm water associated with the design storm is retained on-site as required by Part VI.D.6Z.c.i. of this Order, and as conditioned in the building permit issued by the Permittee.
- 5. Regional studies** are required to further characterize the impact of the MS4 discharges on the beneficial uses of the receiving waters. Regional studies shall include the Southern California Stormwater Monitoring Coalition (SMC) Regional Watershed Monitoring Program (bioassessment), ~~sediment monitoring for Pyrethroid pesticides,~~ and special studies as specified in approved TMDLs (see Section XIX TMDL Reporting, below).

III. GENERAL MONITORING AND REPORTING REQUIREMENTS

- A.** Monitoring shall be conducted in accordance with the requirements specified in Attachment D to this Order (Part III, Standard Provisions - Monitoring).
- B.** Records of monitoring information shall include information required under Attachment D to this Order (Part IV, Standard Provisions - Records).
- C.** All applications, reports, plans, or other information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Attachment D to this Order (Part V.B, Standard Provisions - Reporting, Signatory and Certification Requirements).
- D.** Monitoring results shall be reported in accordance with the requirements specified in Attachment D to this Order (Part V.C, Standard Provisions - Reporting, Monitoring Reports).
- E.** All monitoring and reporting shall be conducted in accordance with the Standard Monitoring Provisions specified in Part XIV of this MRP.
- F. Sampling Methods**
1. Sampling methods shall be fully described in each Permittee's Integrated Monitoring Program (IMP) or Coordinated Integrated Monitoring Program (CIMP) and according to the provisions of the Standard Provisions for Monitoring described in Attachment D to this Order and Part XIV of this MRP.
 2. Grab samples shall be taken ~~only~~ for constituents that are required to be collected as such (e.g., pathogen indicator bacteria, oil and grease, cyanides, and volatile organics); in instances where grab samples are generally expected to be sufficient to characterize water quality conditions (primarily dry weather); and where the sample location limits Permittees' ability to install an automated sampler, as provided for in an approved IMP or CIMP.

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- ~~3. Sampling and monitoring methods for trash shall be conducted in accordance with the applicable requirements specified in Part VI.E.5 of this Order.~~
3. At a minimum, a sufficient volume of sample must be collected to perform all of the required biological and chemical tests, including TIEs where aquatic toxicity is observed during the sample event.
- ~~4. Sampling and monitoring methods for trash shall be conducted in accordance with the applicable requirements specified in Part VI.E.5 of this Order.~~
- 4.
5. Flow may be estimated using USEPA methods at receiving water monitoring stations where flow measuring equipment is ~~rements are~~ not in place.
- ~~5.6.~~ Flow may be estimated for storm water outfall monitoring based on drainage area, impervious cover, and precipitation data as approved in an IMP or CIMP.

G. Analytical Procedures

1. Suspended-Sediment Concentration (SSC) shall be analyzed per American Society for Testing and Materials (ASTM) Standard Test Method D-3977-97.
2. Monitoring methods for trash shall be conducted in accordance with the applicable requirements specified in Part VI.E.5 of this Order.
3. Aquatic toxicity shall be monitored in accordance with Part XI of this MRP.
4. All other parameters shall be analyzed according to the provisions of the Standard Provisions for Monitoring described in Attachment D to this Order and Part XIV of this MRP.

H. Reporting

- ~~1. Monitoring results submitted to the Regional Water Board shall include:~~
 - ~~a. Rain totals and hydrographs for monitoring events in both narrative and graphic formats.~~
 - ~~b. A narrative description of the date and duration of the storm event(s) sampled, rainfall estimates of the storm event that generated the sampled discharge and the duration between the storm event sampled and the end of the previous measurable storm event.~~

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~~2.1.~~ Reporting requirements related to the monitoring of trash shall be conducted in accordance with Part VI.E.5.c of this Order.

~~3.2.~~ Monitoring results submitted to the Regional Water Board shall be consistent with the requirements identified in Part XVIII.A.5 and Part XVIII.A.7 of this MRP.

IV. INTEGRATED MONITORING PROGRAMS

A. Integrated Monitoring Program (IMP)

1. Each Permittee may develop an Integrated Monitoring Program designed to satisfy the monitoring requirements of this Order.
2. The monitoring requirements contained in TMDL ~~CMPs~~ Monitoring Plans approved by the Executive Officer of the Regional Water Board are incorporated by reference into this MRP (See Table E-1 for a list of approved TMDL ~~CMPs~~ Monitoring Plans).
3. The Integrated Monitoring Program may leverage monitoring resources by selecting monitoring locations, parameters, or monitoring techniques that will satisfy multiple monitoring requirements.
4. Where appropriate ~~(e.g., dry weather outfall based screening program)~~, the Integrated Monitoring Program may develop and utilize alternative approaches to meet the Primary Objectives (Part II.A). ~~screening level monitoring strategies to avoid more costly analytical procedures if approved~~ Such alternative approaches shall be subject to public review and final approval by the Regional Water Board Executive Officer.
5. The requirements of an approved TMDL ~~CMP~~ Monitoring Plan may be modified by an IMP that is subsequently approved by the Executive Officer of the Regional Water Board.
6. At a minimum, the IMP must address all TMDL and Non-TMDL monitoring requirements of this Order, including receiving water monitoring, storm water outfall based monitoring, non-storm water outfall based monitoring, and regional water monitoring studies, except as provided in Parts IV.B.2 and 3 of this MRP.

B. Coordinated Integrated Monitoring Program (CIMP)

1. Benefits of the CIMP Approach

- a. The CIMP provides Permittees opportunities to increase the cost efficiency and effectiveness of the monitoring program. The greatest efficiency may be achieved when a CIMP is designed and implemented on a watershed basis.
- b. A CIMP may be employed to implement regional studies, where a single Permittee takes the lead in directing the study, and the other Permittees provide funding or in lieu services.

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2. Permittees are encouraged to coordinate their monitoring programs with other Permittees to develop and implement a CIMP. A CIMP may be developed to address one or more of the required monitoring elements (i.e., receiving water monitoring, outfall based monitoring, regional monitoring or special studies) and may be county-wide or limited to a single watershed, sub-watershed or defined jurisdictional boundary.
3. The requirements of an approved TMDL ~~CIMP~~ Monitoring Plan may be modified by an IMP or CIMP that is subsequently approved by the Executive Officer of the Regional Water Board.
4. A Permittee shall not be required to submit an IMP if all of the applicable monitoring requirements in this Order are addressed in a CIMP, to which the Permittee is a participant.
5. If the CIMP addresses some but not all of the applicable monitoring requirements required under this Order, then each Permittee shall submit an IMP that references the CIMP. The Permittees must describe how together, the IMP and CIMP, fulfill all of the applicable monitoring requirements contained in this Order.
- ~~5.6.~~ Where appropriate, the CIMP may develop and utilize alternative approaches to meet the Primary Objectives (Part II.A). Sufficient justification shall be provided in the CIMP for the alternative approach(es). Such alternative approaches shall be subject to public review and final approval by the Regional Water Board Executive Officer.

C. Schedule for Submitting the Monitoring Plan to the Regional Water Board and Conducting Outfall Screening

1. Within six (6) months after the effective date of this Order, each Permittee shall submit a letter of intent to the Executive Officer of the Regional Water Board describing whether it intends to follow an IMP or CIMP approach for each of the required monitoring plan elements.
2. Each Permittee not electing to develop a Watershed Management Program (WMP) shall submit an IMP plan addressing monitoring requirements that the Permittee intends to implement individually to the Executive Officer of the Regional Water Board within ~~twelve~~ nine (129) months after the effective date of this Order.
3. ~~The participating Permittees~~ electing to develop a WMP shall submit an IMP or CIMP plan and a letter of intent, signed by each of the participating Permittees, to the Executive Officer of the Regional Water Board concurrently with their draft WMP within 12 months after the effective date of this Order.
- ~~3.4.~~ Permittees electing to develop an enhanced WMP shall submit an IMP or CIMP plan to the Executive Officer of the Regional Water Board within 18 months after the effective date of this Order.
- 4.5. If upon finalization of the CIMP plan, a Permittee that has developed an IMP determines that its IMP plan must be revised to include monitoring

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requirements not covered under the final CIMP, the revised IMP plan shall be submitted to the Executive Officer of the Regional Water Board within 60 days after approval of the CIMP plan by the Executive Officer of the Regional Water Board.

5.6. Monitoring shall commence within 30 days after approval of the IMP₁ or within 90 days after approval of the CIMP₁ plan by the Executive Officer of the Regional Water Board.

6.7. If a Permittee elects not to develop or participate in an IMP or CIMP, monitoring shall be conducted on a jurisdictional basis per the requirements contained in Parts V through XIII and XIX of this MRP, beginning six (6) months after the effective date of this Order.

7.8. Monitoring requirements pursuant to Order No. 01-182 and Monitoring and Reporting Program CI 6948, and pursuant to approval TMDL monitoring plans identified in Table E-1, shall remain in effect until the Executive Officer of the Regional Water Board approves a Permittee(s) IMP and/or CIMP plan(s).

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V. TMDL MONITORING PLANS

Table E-1. Approved TMDL Monitoring Plans by Watershed Management Area

TMDL	Comment	Date of Final Plan	Regional Water Board Approval Date
Santa Clara River Watershed Management Area			
Santa Clara River Nitrogen Compounds TMDL	Monitoring Plan was due March 23, 2005.	---	---
Upper Santa Clara River Chloride TMDL	Monitoring Plan was not required.	N/A	N/A
Lake Elizabeth, Munz Lake, and Lake Hughes Trash TMDL (Lake Elizabeth only)	The County of Los Angeles Trash TMDL Monitoring and Reporting Plan for Lake Elizabeth, Munz Lake, and Lake Hughes	June 25, 2009	March 25, 2009
Santa Clara River Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL	Monitoring Plan is due on March 21, 2013.	---	---
Santa Monica Bay Watershed Management Area			

TMDL	Comment	Date of Final Plan	Regional Water Board Approval Date
Santa Monica Bay Beaches Bacteria TMDL (Wet and Dry)	Santa Monica Bay Beaches Bacterial TMDLs Coordinated Shoreline Monitoring Plan	April 7, 2004	January 8, 2004
Santa Monica Bay Nearshore and Offshore Debris TMDL	Monitoring Plan is due on September 20, 2012.	---	---
Santa Monica Bay TMDL for DDTs and PCBs	USEPA Established TMDL	N/A	N/A
Malibu Creek Subwatershed			
Malibu Creek and Lagoon Bacteria TMDL	Malibu Creek and Lagoon Bacteria TMDL Compliance Monitoring Plan	February 25, 2008	April 8, 2008
Malibu Creek Watershed Trash TMDL	Malibu Creek Watershed Trash Monitoring and Reporting Plan (TMRP)	April 28, 2010	Has not been approved.
Malibu Creek Watershed Nutrients TMDL	USEPA Established TMDL	N/A	N/A
Ballona Creek Subwatershed			
Ballona Creek Trash TMDL	Monitoring Plan was not required.	N/A	N/A
Ballona Creek Estuary Toxic Pollutants TMDL	Ballona Creek Metals TMDL and Ballona Creek Estuary Toxic Pollutants TMDL Coordinated Monitoring Plan	May 4, 2009	June 25, 2009
Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL	Ballona Creek, Ballona Estuary, & Sepulveda Channel Bacteria TMDL Coordinated Monitoring Plan	January 29, 2009	December 16, 2008

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TMDL	Comment	Date of Final Plan	Regional Water Board Approval Date
Ballona Creek Metals TMDL	Ballona Creek Metals TMDL and Ballona Creek Estuary Toxic Pollutants TMDL Coordinated Monitoring Plan	May 4, 2009	June 25, 2009
Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation	USEPA Established TMDL	N/A	N/A
Marina del Rey Subwatershed			
Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL	Marina Del Rey Harbor Mothers' Beach and Back Basins Bacterial TMDL Coordinated Monitoring Plan	June 25, 2007	February 1, 2007
Marina del Rey Harbor Toxic Pollutants TMDL	Marina Del Rey Harbor Toxic Pollutants Total Maximum Daily Load Coordinated Monitoring Plan	March 31, 2008	March 3, 2009
Dominguez Channel and Greater Harbors Waters Watershed Management Area			
Los Angeles Harbor Bacteria TMDL (Inner Cabrillo Beach and Main Ship Channel)	Monitoring Plan was not required.	N/A	N/A
Machado Lake Trash TMDL	Trash Monitoring & Reporting Plan: Machado Lake Trash TMDL	September 5, 2008	December 9, 2008
	City of Rolling Hills Trash Monitoring and Reporting Plan Machado Lake Trash TMDL	September 5, 2008	December 9, 2008

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TMDL	Comment	Date of Final Plan	Regional Water Board Approval Date
Machado Lake Nutrient TMDL	Palos Verdes Peninsula Coordinated Monitoring Plan In Compliance with the Machado Lake Nutrient Total Maximum Daily Load	February 1, 2011	December 14, 2010
	Machado Lake Nutrients TMDL Lake Water Quality Management Plan for City of Los Angeles	August 18, 2010	February 14, 2011
	Machado Lake Nutrient TMDL Monitoring and Reporting Program Plan for the City of Carson	March 27, 2012	March 7, 2012
	Machado Lake Multipollutant TMDL Monitoring and Reporting Program for the Unincorporated Areas of Los Angeles County within the Machado Lake Watershed	September 12, 2011	April 25, 2012
	Monitoring Plans were due from the City of Lomita on April 25, 2011, City of Redondo Beach on March 11, 2010, and City of Torrance on May 16, 2012.	---	---
Machado Lake Pesticides and PCBs TMDL	Monitoring Plan is due on September 20, 2012 ¹ .	---	---

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¹ The deadline for Permittees assigned both WLAs and LAs to submit one document to address both WLA and LA monitoring requirements and implementation activities shall be September 20, 2013.

TMDL	Comment	Date of Final Plan	Regional Water Board Approval Date
Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL	Monitoring Plan is due on November 23, 2013.	---	---
Los Angeles River Watershed Management Area			
Los Angeles River Watershed Trash TMDL	Monitoring Plan was not required.	N/A	N/A
Los Angeles River Nitrogen Compounds and Related Effects TMDL	Monitoring Plan was due on March 23, 2005.	---	---
Los Angeles River and Tributaries Metals TMDL	Los Angeles River Metals TMDL Coordinated Monitoring Plan	March 25, 2008	April 11, 2008
Los Angeles River Watershed Bacteria TMDL	Monitoring Plan is due on March 23, 2013.	---	---
Legg Lake Trash TMDL	Legg Lake Trash Monitoring & Reporting Plan: Legg Lake Trash TMDL	September 5, 2008	March 25, 2009
Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL	USEPA Established TMDL	N/A	N/A
Los Angeles Area Lakes TMDLs (Lake Calabastas, Echo Park Lake, Legg Lake and Peck Road Park Lake)	USEPA Established TMDL	N/A	N/A
San Gabriel River Watershed Management Area			
San Gabriel River and Impaired Tributaries Metals and Selenium TMDL	USEPA Established TMDL	N/A	N/A

R E V I S E D T E N T A T I V E

TMDL	Comment	Date of Final Plan	Regional Water Board Approval Date
Logg Lake Trash TMDL	Logg Lake Trash Monitoring & Reporting Plan: Logg Lake Trash TMDL	September 5, 2008	March 25, 2009
Los Angeles Area Lakes TMDLs (Logg Lake and Puddingstone Reservoir)	USEPA Established TMDL	N/A	N/A
Los Cerritos Channel and Alamitos Bay Watershed Management Area			
Los Cerritos Channel Metals TMDL	USEPA Established TMDL	N/A	N/A
Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL	Colorado Lagoon TMDL Monitoring Plan (CLTMP)	January 28, June 15, 2012	Has not been approved. August 23, 2012
Middle Santa Ana River Watershed Management Area			
Middle Santa Ana River Watershed Bacteria Indicator TMDL	Monitoring Plan was due on November 16, 2007.	---	---

R E V I S E D T E N T A T I V E

VI. RECEIVING WATER MONITORING

A. IMP Receiving Water Monitoring Requirements

1. ~~All~~ The IMP plans must contain the following information for receiving water monitoring:
 - a. Declaration of whether receiving water monitoring is conducted under an IMP, CIMP or both.
 - b. If receiving water monitoring is performed under the IMP, the plan must contain the following information:
 - i. A map (preferably GIS) identifying the proposed receiving water monitoring stations for both dry weather and wet weather monitoring.
 - ii. An explanation of how and why monitoring at the proposed locations will provide representative measurement of the effects of the Permittee’s MS4 discharges on the receiving water.

- iii. Identification of applicable TMDLs and TMDL compliance points, based on approved TMDL ~~GMPs~~ Monitoring Plans and/or as identified in the Basin Plan for the applicable TMDLs.
- iv. A description of how the Permittee is fulfilling its obligations for TMDL receiving water monitoring under this IMP, CIMP or other monitoring plans.
- v. A description of how the Permittee is contributing to the monitoring of mass emission stations or a discussion of why monitoring at mass emission stations is not being supported.

B. CIMP Receiving Water Monitoring Requirements

1. The CIMP plan must contain the following information for receiving water monitoring:
 - a. A list of the participating Permittees.
 - b. A map (preferably GIS) delineating the geographic boundaries of the monitoring plan including the receiving waters, the MS4 catchment drainages and outfalls, subwatershed boundaries (i.e., HUC 12), political boundaries, land use, and the –proposed receiving water monitoring stations for both dry weather and wet weather receiving water monitoring.
 - c. An explanation of how and why monitoring at the proposed locations will provide representative measurement of the effects of the MS4 discharges on the receiving water.
2. TMDLs
 - a. A list of applicable TMDLs and TMDL compliance points, based on approved TMDL ~~GMPs~~ Monitoring Plans and/or as identified in the Basin Plan for the applicable TMDLs.
 - b. Identification of the proposed receiving water monitoring stations that fulfill the TMDL ~~GMP~~ Monitoring Plan(s) requirements.
 - b-c. Shoreline Monitoring Stations monitored pursuant to a bacteria TMDL. Sampling for bacterial indicators (total coliform, fecal coliform (or E. coli), and enterococcus) at shoreline monitoring locations addressed by a TMDL shall be conducted 5 times per week at sites subject to the reference system criterion for allowable exceedance days, and weekly at sites subject to the antidegradation criterion for allowable exceedance days.
3. Mass Emission Stations
 - a. Location of mass emission stations,
 - b. Description of monitoring at mass emission stations or justification of why monitoring at the mass emission stations will be discontinued.

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C. Minimum Wet Weather Receiving Water Monitoring Requirements

1. The IMP ~~and/or~~ CIMP shall incorporate the following minimum requirements for monitoring the receiving water during wet weather conditions:
 - a. The receiving water shall be monitored a minimum of three times per year for all parameters except aquatic toxicity, which must be monitored at least twice per year, or more frequently if required by applicable TMDL ~~GMPs~~ Monitoring Plans.
 - b. Monitoring shall be performed in the receiving water during wet weather conditions, defined for the purposes of this monitoring program as follows:
 - i. When the receiving water is the Santa Monica Bay or other ocean or estuarine~~y~~ water body, wet weather occurs during a storm event of greater than or equal to 0.1 inch of precipitation, as measured from at least 50 percent of the Los Angeles County controlled rain gauges within the watershed, or based on an alternative precipitation threshold as provided for in an approved IMP or CIMP.
 - ii. When the receiving water body is a river, stream or creek, wet weather shall be defined as when the flow within the receiving water is at least 20 percent greater than the base flow or an alternative threshold as provided for in an approved IMP or CIMP, or as defined by effective TMDLs within the watershed.
 - iii. Monitoring shall occur during wet weather conditions, including targeting the first significant rain event of the storm year following the criteria below, and at least two additional wet weather events within the same wet weather season. Permittees shall target the first storm event of the storm year with a predicted rainfall of at least 0.25 inch at a seventy percent probability of rainfall at least 24 hours prior to the event start time. Permittees shall target subsequent storm events that forecast sufficient rainfall and runoff to meet program objectives and site specific study needs. Sampling events shall be separated by a minimum of three days of dry conditions (less than 0.1 inch of rain each day).
 - c. Receiving water monitoring shall begin ~~within 6 hours~~ as soon as possible after storm water outfall-based monitoring, in order to be reflective of potential impacts from MS4 discharges ~~unless Permittees can demonstrate that a longer time period is reflective of the rain event.~~
 - d. At a minimum, the following parameters shall be monitored unless a surrogate pollutant has been approved by the Executive Officer of the Regional Water Board.
 - i. Flow
 - ii. Pollutants assigned a receiving water limitation derived from TMDL WLAs (See Attachments L-R of this Order),

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- iii. Other pollutants identified on the CWA section 303(d) List for the receiving water or downstream receiving waters,
 - iv. Total Suspended Solids (TSS) and Suspended-Sediment Concentration (SSC) if the receiving water is listed on the CWA section 303(d) list for sedimentation, siltation or turbidity,²
 - v. Field measurements applicable to inland freshwater bodies only: hardness, pH, dissolved oxygen, temperature, and specific conductivity,
 - vi. Aquatic Toxicity (twice per year, once during first storm event of the storm year as specified above).
- vi.e.** Additionally, the screening parameters in Table E-2 shall be monitored in the first year of monitoring during the first significant rain event of the storm year. If a parameter is not detected at the Method Detection Limit (MDL) for its respective test method or the result is below the lowest applicable water quality objective, and is not otherwise identified in subparts d.i.-d.vi. above, it need not be further analyzed. If a parameter is detected exceeding the lowest applicable water quality objective then the parameter shall be analyzed for the remainder of the Order during wet weather at the receiving water monitoring station where it was detected.

D. Minimum Dry Weather Receiving Water Monitoring

1. The IMP and/or CIMP plan shall incorporate the following minimum requirements for monitoring the receiving water during dry weather conditions:
 - a. The receiving water shall be monitored a minimum of two times per year for all parameters, or more frequently if required by applicable TMDL CMPs Monitoring Plans. One of the monitoring events shall be during the month with the historically lowest instream flows, or where instream flow data are not available, during the historically driest month.
 - b. Monitoring shall be performed in the receiving water during dry weather conditions, defined as follows:
 - i. When the receiving water is the Santa Monica Bay or other ocean or estuary water body, dry weather occurs on days with less than 0.1 inch of rain and those days not less than three days after a rain event of 0.1 inch or greater within the watershed, as measured from at least 50 percent of Los Angeles County controlled rain gauges within the watershed, or an alternative criterion as provided for in an approved IMP or CIMP.

² Gray, John, R., G. Douglas Glysson, Lisa M. Turcios, and Gregory E. Schwarz. 2000. *Comparability of Suspended-Sediment Concentration and Total Suspended Solids Data*. United States Geological Survey. Water Resources Investigations Report 00-4191. August 2000.

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- ii. When the receiving water body is a river, stream or creek, dry weather shall be defined as when the flow is less than 20 percent greater than the base flow or as defined by effective TMDLs within the watershed, or an alternative criterion as provided for in an approved IMP or CIMP.
- c. At a minimum the following parameters shall be monitored during dry weather conditions, unless a surrogate pollutant has been approved by the Executive Officer of the Regional Water Board:
 - i. Flow
 - ii. Pollutants assigned receiving water limitations derived from TMDL dry weather WLAs,
 - iii. Other pollutants identified on the CWA section 303(d) List for the receiving water or downstream receiving waters,
 - ~~iv. Pollutants assigned non-storm water action levels in Attachment G,~~
 - ~~v.iv.~~ TSS and hardness, when metals are monitored,
 - ~~vi.v.~~ Field measurements for monitoring of inland freshwater bodies: dissolved oxygen, pH, temperature, and specific conductivity,
 - ~~vi.~~ Aquatic Toxicity (~~twice~~ once per year, ~~once~~ during the month with the historically lowest flows).
- d. Additionally, the parameters in Table E-2 shall be monitored in the first year of monitoring during the critical dry weather event. If a parameter is not detected at the Method Detection Limit (MDL) for its respective test method or the result is below the lowest applicable water quality objective, and is not otherwise identified in subparts c.i.-c.iii. or c.v.-c.vii. above, it need not be further analyzed. If a parameter is detected exceeding the lowest applicable water quality objective then the parameter shall be analyzed for the remainder of the Order during dry weather at the receiving water monitoring station where it was detected.

Table E-2. Storm Water Monitoring Program’s Constituents with Associated Minimum Levels (MLs)³

CONSTITUENTS	MLs
CONVENTIONAL POLLUTANTS	mg/L
Oil and Grease	5
Total Phenols	0.1
Cyanide	0.005
pH	0 - 14
Temperature	N/A
Dissolved Oxygen	Sensitivity to 5 mg/L

³ For priority pollutants, MLs published in Appendix 4 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California (SIP) shall be used for all analyses, unless otherwise specified. Method Detection Levels (MDLs) must be lower than or equal to the ML value, unless otherwise approved by the Regional Board.

CONSTITUENTS	MLs
BACTERIA (single sample limits)	MPN/100ml
Total coliform (marine waters)	10,000
Enterococcus (marine waters)	104
Fecal coliform (marine & fresh waters)	400
E. coli (fresh waters)	235
GENERAL	mg/L
Dissolved Phosphorus	0.05
Total Phosphorus	0.05
Turbidity	0.1 NTU
Total Suspended Solids	2
Total Dissolved Solids	2
Volatile Suspended Solids	2
Total Organic Carbon	1
Total Petroleum Hydrocarbon	5
Biochemical Oxygen Demand	2
Chemical Oxygen Demand	20-900
Total Ammonia-Nitrogen	0.1
Total Kjeldahl Nitrogen	0.1
Nitrate-Nitrite	0.1
Alkalinity	2
Specific Conductance	1 umho/cm
Total Hardness	2
MBAS	0.5
Chloride	2
Fluoride	0.1
Methyl tertiary butyl ether (MTBE)	1
Perchlorate	4 µg/L
METALS (Dissolved & Total)	µg/L
Aluminum	100
Antimony	0.5
Arsenic	1
Beryllium	0.5
Cadmium	0.25
Chromium (total)	0.5
Chromium (Hexavalent)	5
Copper	0.5
Iron	100
Lead	0.5
Mercury	0.5
Nickel	1
Selenium	1
Silver	0.25
Thallium	1
Zinc	1
SEMIVOLATILE ORGANIC COMPOUNDS	
ACIDS	µg/L
2-Chlorophenol	2
4-Chloro-3-methylphenol	1
2,4-Dichlorophenol	1
2,4-Dimethylphenol	2
2,4-Dinitrophenol	5
2-Nitrophenol	10

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CONSTITUENTS	MLs
ACIDS	µg/L
4-Nitrophenol	5
Pentachlorophenol	2
Phenol	1
2,4,6-Trichlorophenol	10
BASE/NEUTRAL	µg/L
Acenaphthene	1
Acenaphthylene	2
Anthracene	2
Benzidine	5
1,2 Benzanthracene	5
Benzo(a)pyrene	2
Benzo(g,h,i)perylene	5
3,4 Benzoflouranthene	10
Benzo(k)flouranthene	2
Bis(2-Chloroethoxy) methane	5
Bis(2-Chloroisopropyl) ether	2
Bis(2-Chloroethyl) ether	1
Bis(2-Ethylhexl) phthalate	5
4-Bromophenyl phenyl ether	5
Butyl benzyl phthalate	10
2-Chloroethyl vinyl ether	1
2-Chloronaphthalene	10
4-Chlorophenyl phenyl ether	5
Chrysene	5
Dibenzo(a,h)anthracene	0.1
1,3-Dichlorobenzene	1
1,4-Dichlorobenzene	1
1,2-Dichlorobenzene	1
3,3-Dichlorobenzidine	5
Diethyl phthalate	2
Dimethyl phthalate	2
di-n-Butyl phthalate	10
2,4-Dinitrotoluene	5
2,6-Dinitrotoluene	5
4,6 Dinitro-2-methylphenol	5
1,2-Diphenylhydrazine	1
di-n-Octyl phthalate	10
Fluoranthene	0.05
Fluorene	0.1
Hexachlorobenzene	1
Hexachlorobutadiene	1
Hexachloro-cyclopentadiene	5
Hexachloroethane	1
Indeno(1,2,3-cd)pyrene	0.05
Isophorone	1
Naphthalene	0.2
Nitrobenzene	1
N-Nitroso-dimethyl amine	5
N-Nitroso-diphenyl amine	1
N-Nitroso-di-n-propyl amine	5
Phenanthrene	0.05

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CONSTITUENTS	MLs
BASE/NEUTRAL	µg/L
Pyrene	0.05
1,2,4-Trichlorobenzene	1
CHLORINATED PESTICIDES	µg/L
Aldrin	0.005
alpha-BHC	0.01
beta-BHC	0.005
delta-BHC	0.005
gamma-BHC (lindane)	0.02
alpha-chlordane	0.1
gamma-chlordane	0.1
4,4'-DDD	0.05
4,4'-DDE	0.05
4,4'-DDT	0.01
Dieldrin	0.01
alpha-Endosulfan	0.02
beta-Endosulfan	0.01
Endosulfan sulfate	0.05
Endrin	0.01
Endrin aldehyde	0.01
Heptachlor	0.01
Heptachlor Epoxide	0.01
Toxaphene	0.5
POLYCHLORINATED BIPHENYLS	µg/L
Aroclor-1016	0.5
Aroclor-1221	0.5
Aroclor-1232	0.5
Aroclor-1242	0.5
Aroclor-1248	0.5
Aroclor-1254	0.5
Aroclor-1260	0.5
ORGANOPHOSPHATE PESTICIDES	µg/L
Atrazine	2
Chlorpyrifos	0.05
Cyanazine	2
Diazinon	0.01
Malathion	1
Prometryn	2
Simazine	2
HERBICIDES	µg/L
2,4-D	10
Glyphosate	5
2,4,5-TP-SILVEX	0.5

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VII. OUTFALL BASED MONITORING

A. MS4 Map and Storm Drains, Channels and Outfalls Map(s) and/or Database.
The IMP and/or CIMP plan(s) shall include a map(s) and/or database of the MS4 to include the following information:

1. Surface water bodies within the Permittee(s) jurisdiction

2. Sub-watershed (HUC 12) boundaries
3. Land use overlay
4. Effective Impervious Area (EIA) overlay (if available)
5. Jurisdictional boundaries
6. The location and length of all open channel and underground pipes 18 inches in diameter or greater
7. The location of all dry weather diversions
8. The location of all major MS4 outfalls within the Permittee's jurisdictional boundary. Each major outfall shall be assigned an alphanumeric identifier, which must be noted on the map
9. Notation of outfalls with significant non-storm water discharges (to be updated annually)
10. Storm drain outfall catchment areas for each major outfall within the Permittee(s) jurisdiction
11. Each mapped MS4 outfall shall be linked to a database containing descriptive and monitoring data associated with the outfall. The data shall include:
 - a. Ownership
 - b. Coordinates
 - c. Physical description
 - d. Photographs of the outfall, where possible, ~~shall be taken~~ to provide baseline information to track operation and maintenance needs over time
 - e. Determination of whether the outfall conveys significant non-storm water discharges
 - f. Storm water and non-storm water monitoring data

VIII. STORM WATER OUTFALL BASED MONITORING

A. Storm Water Outfall Based Monitoring

1. Storm water discharges from the MS4 shall be monitored at outfalls, and/or alternative access points such as manholes or in channels at the Permittee's jurisdictional boundary.
2. The Permittee shall consider the following criteria when selecting outfalls for storm water discharge monitoring:
 - a. The storm water outfall based monitoring program ~~shall~~ should ensure representative data by include monitoring from at least one major outfall per subwatershed (HUC 12) drainage area, within the Permittee's jurisdiction, or alternate approaches as approved in an IMP or CIMP.
 - b. The drainage(s) to the selected outfall(s) shall be representative of the land uses within the Permittee's jurisdiction.

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- c. If a Permittee is implementing an IMP, to the extent possible, the selected outfalls shall not receive drainage from another jurisdiction. If this is not possible, and a Permittee is pursuing an individual outfall based IMP program, the Permittee shall conduct “upstream” and “downstream” monitoring as the system enters and exits the Permittee’s jurisdiction.
- d. The Permittee shall select outfalls with configurations that facilitate accurate flow measurement and in consideration of safety of monitoring personnel.
- e. The specific location of sample collection may be within the MS4 upstream of the actual outfall to the receiving water if field safety or accurate flow measurement require it.

B. Minimum Storm Water Outfall Based Monitoring Requirements

1. The IMP and/or CIMP shall incorporate the following minimum requirements for monitoring storm water:
 - a. Storm water discharges shall be monitored a minimum of three times per year for all parameters except aquatic toxicity, ~~which shall be monitored once per year (unless a proximate downstream receiving water monitoring location has not exhibited aquatic toxicity during the past two years).~~
 - b. Monitoring shall be performed at the selected outfalls during wet weather conditions, defined for the purposes of this monitoring program as follows:
 - i. When the receiving water is the Santa Monica Bay or other ocean or estuary water body, wet weather occurs during a storm event equal to or greater than 0.1 inch of precipitation, as determined by the closest Los Angeles County rain gauge to the catchment area draining to the outfall, or based on an alternative precipitation threshold as provided for in an approved IMP or CIMP.
 - ii. When the receiving water body is a river, stream or creek, wet weather shall be defined as when the flow within the receiving water is at least 20 percent greater than the base flow or an alternative threshold as provided for in an approved IMP or CIMP, or as defined by effective TMDLs within the watershed.
 - iii. Monitoring of storm water discharges shall occur during wet weather conditions resulting from the first rain event of the year, and at least two additional wet weather events within the same wet weather season. Permittees shall target the first storm event of the storm year with a predicted rainfall of at least 0.25 inch at a seventy percent probability of rainfall at least 24 hours prior to the event start time. Permittees shall target subsequent storm events that forecast sufficient rainfall and runoff to meet program objectives and site specific study needs. Sampling events shall be separated by a minimum of three days of dry conditions (less than 0.1 inch of rain each day).

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- ~~iv. Storm water outfall based monitoring shall commence within 6 hours prior to downstream receiving water monitoring, unless Permittees can demonstrate that a longer time period is reflective of the rain/storm water runoff event.~~
- c. At a minimum, the following parameters shall be monitored unless a surrogate pollutant has been approved by the Executive Officer of the Regional Water Board:
- i. Flow
 - ii. Pollutants assigned a WQBEL derived from TMDL WLAs (See Attachments L-R of this Order),
 - iii. Other pollutants identified on the CWA section 303(d) List for the receiving water or downstream receiving waters,
 - iv. Total Suspended Solids (TSS) and Suspended-Sediment Concentration (SSC) if the receiving water is listed on the CWA Section 303(d) list for sedimentation, siltation or turbidity,
 - v. Field measurements applicable to inland freshwater bodies only: hardness, pH, dissolved oxygen, temperature, and specific conductivity,
 - ~~vi. Aquatic Toxicity~~ Pollutants identified in a TIE conducted at the downstream receiving water monitoring station during the most recent sample event, or where the TIE conducted on the receiving water sample was inconclusive, aquatic toxicity (if aquatic toxicity has been observed downstream of the outfall in the past two years). If the discharge exhibits aquatic toxicity, then a TIE shall be conducted.
 - vi.d. Other parameters in Table E-2 identified as exceeding the lowest applicable water quality objective in the nearest downstream receiving water monitoring station per Part VI.C.1.e.

C. Sampling Methods

1. Samples shall be collected during the first 24 hours of the storm water discharge or for the entire storm water discharge if it is less than 24 hours.
2. If a Permittee is not participating in a IMP or CIMP, the flow-weighted composite sample for a storm water discharge shall be taken with a continuous sampler, or it shall be taken as a combination of a minimum of 3 sample aliquots, taken in each hour of discharge for the first 24 hours of the discharge or for the entire discharge if the storm event is less than 24 hours, with each aliquot being separated by a minimum of 15 minutes within each hour of discharge, unless the Regional Water Board Executive Officer approves an alternate protocol.

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IX. NON-STORM WATER OUTFALL BASED SCREENING AND MONITORING**A. Objectives of the Non-Storm Water Outfall Screening and Monitoring Program**

The outfall screening and monitoring process is intended to meet the following objectives.

1. Develop criteria or other means to ensure that all outfalls with significant non-storm water discharges are identified and assessed during the term of this Order.
2. For outfalls determined to have significant non-storm water flow, determine whether flows are the result of illicit connections/illicit discharges (IC/IDs), authorized or conditionally exempt non-storm water flows, natural flows, or from unknown sources.
3. Refer information related to identified IC/IDs to the IC/ID Elimination Program (Part VI.D.9-10 of this Order) for appropriate action.
4. Based on existing screening or monitoring data or other institutional knowledge, assess the impact of non-storm water discharges (other than identified IC/IDs) on the receiving water.
5. Prioritize monitoring of outfalls considering the potential threat to the receiving water and applicable TMDL compliance schedules.
6. Conduct monitoring or assess existing monitoring data to determine the impact of non-storm water discharges on the receiving water.
7. Conduct monitoring or other investigations to identify the source of pollutants in non-storm water discharges.
8. Use results of the screening process to evaluate the conditionally exempt non-storm water discharges identified in Parts III.A.2 and III.A.3 of this Order and take appropriate actions pursuant to Part III.A.4.d of this Order for those discharges that have been found to be a source of pollutants. Any future reclassification shall occur per the conditions in Parts III.A.2 or III.A.6 of this Order.
9. Maximize the use of Permittee resources by integrating the screening and monitoring process into existing or planned IMP and/or CIMP efforts.

B. Outfall Screening and Monitoring Plan

1. Concurrent with the development of an IMP or CIMP, or within ~~six (6) months~~ one (1) year of the effective date of this Order, each Permittee shall submit a non-storm water outfall-based screening and monitoring program plan that documents with written procedures an explanation of how the program is to be implemented. The procedures must be updated as needed to reflect the Permittee's program. The plan may be a separate stand-alone document or may be part of an IMP or CIMP.

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2. Each Permittee shall conduct at least one re-assessment of its non-storm water outfall-based screening and monitoring program during the term of this Order to determine whether changes or updates are needed. Where changes are needed, the Permittee shall make the changes in its written program documents, implement these changes in practice, and describe the changes within the next annual report.

C. Identification of Outfalls with Significant with Non-Storm Water Discharge

1. Based on the inventory of MS4 outfalls required under Part VII of this MRP, each Permittee shall identify MS4 outfalls with significant non-storm water discharges. Significant non-storm water discharges may be determined by one or more of the following characteristics:
 - a. Discharges from major outfalls subject to dry weather TMDLs.
 - b. Discharges for which existing monitoring data exceeds non-storm water Action Levels identified in Attachment G of this Order.
 - c. Non-storm water discharges that have caused or have the potential to cause overtopping of downstream diversions.
 - d. Discharges exceeding a proposed threshold discharge rate as determined by the Permittee.
 - e. Other characteristics as determined by the Permittee and incorporated within their screening program plan.

D. Inventory of MS4 Outfalls with Non-Storm Water Discharges

1. Each Permittee shall develop and maintain an inventory of MS4 outfalls and identify those with known significant non-storm water discharges and those requiring no further assessment. If the MS4 outfall requires no further assessment, the inventory must include the rationale for the determination of no further action required. This inventory shall be recorded in a database with outfall locations linked to the MS4-Storm Drains, Channels and Outfalls map required in Part VII.A of this MRP. GIS is preferred.
2. As a component of the inventory, each Permittee shall record existing data from past outfall screening and monitoring and initiate data collection efforts as warranted. The data shall include the physical attributes of those MS4 outfalls or alternative monitoring locations determined to have significant non-storm water discharges. Attributes to be obtained shall, at a minimum, include:
 - a. Date and time of last visual observation or inspection
 - b. Outfall alpha-numeric identifier
 - c. Description of outfall structure including size (e.g., diameter and shape)
 - d. Description of receiving water at the point of discharge (e.g., natural, soft-bottom with armored sides, trapezoidal, concrete channel)

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- e. Latitude/longitude coordinates
 - f. Nearest street address
 - g. Parking, access, and safety considerations
 - h. Photographs of outfall condition
 - i. Photographs of significant non-storm water discharge (or indicators of discharge) unless safety considerations preclude obtaining photographs
 - j. Estimation of discharge rate
 - k. All diversions either upstream or downstream of the outfall
 - l. Observations regarding discharge characteristics such as turbidity, odor, color, presence of debris, floatables, or characteristics that could aid in pollutant source identification.
4. Each year, the MS4—Storm Drains, Channels and Outfalls map and associated outfall database required in Part VII.A of the MRP shall be updated to incorporate the most recent characterization data for outfalls with significant non-storm water discharge.

E. Prioritized Source Identification

1. Outfalls within the inventory shall be prioritized in the following order (a= highest priority, etc.) for source identification activities:
 - a. Outfalls discharging directly to receiving waters with WQBELs or receiving water limitations in the TMDL provisions for which final compliance deadlines have passed.
 - b. All major outfalls and other outfalls that discharge to a receiving water subject to a TMDL shall be prioritized according to TMDL compliance schedules.
 - c. Outfalls for which monitoring data exist and indicate recurring exceedances of one or more of the Action Levels identified in Attachment G of this Order.
 - d. All other major outfalls identified to have significant non-storm water discharges.
2. Each Permittee shall develop a source identification schedule based on the prioritized list of outfalls exhibiting significant non-storm water discharges. The schedule shall ensure that source investigations are conducted for no less than 25% of the outfalls in the inventory within three years of the effective date of this Order and 100% of the outfalls in the inventory within 5 years of the effective date of this Order.
3. Alternatively, a Permittee may request an alternative prioritization and schedule from the Regional Water Board if it can demonstrate an equivalent level of source investigation and abatement through an approved IMP or CIMP.

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F. Identify Source(s) of Significant Non-Storm Water Discharge

1. If the source is determined to be an illicit discharge, each Permittee shall implement procedures to eliminate the discharge consistent with IC/ID requirements and document the actions in the next annual report.
2. If the source is determined to be an NPDES permitted discharge, a discharge subject to a Record of Decision approved by USEPA pursuant to section 121 of CERCLA, a conditionally exempt essential non-storm water discharge, or entirely comprised of natural flows as defined at Part III.A.d of this Order, document the source and report to the Regional Water Board ~~within 30 days of determination and~~ in the next annual report.
3. If the source is either unknown or a conditionally exempt, but non-essential, non-storm water discharge, each Permittee shall conduct monitoring required in Part IX.G of this MRP.
4. If the discharge is comprised of more than one source, the Permittee shall attempt to quantify the relative contribution from the individual or group of similar sources (e.g., irrigation overspray) and classify the contributions as authorized, conditionally exempt essential, natural, illicit discharge, conditionally exempt non-essential, or unknown.
5. If the source of non-storm water discharge is unknown, the Permittee shall describe the efforts undertaken to identify the source. Methods for identifying the source of non-storm water discharge may include inspection and/or surveillance, discharge monitoring and data loggers, video or physical inspection, monitoring for indicator parameters (e.g., surfactants, chlorine, Pyrethroids), or other means.
6. If a source originates within an upstream jurisdiction, the Permittee shall inform in writing both the upstream jurisdiction and the Regional Water Board within 30 days of determination of the presence of the discharge, all available characterization data, contribution determination efforts, and efforts taken to identify its source.
7. MS4 outfalls requiring no further action shall be maintained in the ~~MS4 outfall~~ Storm Drains, Channels and Outfalls map and associated database (see Part VII.A. of this MRP).

G. Monitor Non-Storm Water Discharges Exceeding Criteria

1. Within 90 days after completing the source identification or after the Executive Officer of the Regional Water Board approves the IMP or CIMP, whichever is later, each Permittee shall monitor outfalls that have been determined to convey significant discharges comprised of either unknown or conditionally exempt non-storm water discharges, or continuing discharges attributed to illicit discharges. The following parameters shall be monitored:

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- ~~e.b.~~ _____ Pollutants assigned a WQBEL or receiving water limitation to implement TMDL Provisions for the respective receiving water, as identified in Attachments L - R of this Order,
- ~~f.~~ _____ ~~Pollutants with non-storm water action levels as identified in Attachment G of this Order,~~
- ~~g.c.~~ _____ Other pollutants identified on the CWA section 303(d) List for the receiving water or downstream receiving waters,
- ~~d.~~ _____ ~~Aquatic Toxicity (required when the previous monitoring results from this outfall indicated toxicity, or results from a proximate downstream receiving water monitoring indicated aquatic toxicity during the last two years)~~ Pollutants identified in a TIE conducted in response to observed aquatic toxicity during dry weather at the nearest downstream receiving water monitoring station during the last sample event or, where the TIE conducted on the receiving water sample was inconclusive, aquatic toxicity. If the discharge exhibits aquatic toxicity, then a TIE shall be conducted.
- ~~h.e.~~ _____ Other parameters in Table E-2 identified as exceeding the lowest applicable water quality objective in the nearest downstream receiving water monitoring station per Part VI.D.1.d.
2. For outfalls subject to a dry weather TMDL, monitoring frequency shall be per the approved CMP TMDL Monitoring Plan or as otherwise specified in the TMDL, or as specified in an IMP or CIMP approved by the Executive Officer of the Regional Water Board.
 3. For outfalls not subject to dry weather TMDLs, monitoring frequency shall be four times during the first year following source identification, distributed approximately quarterly, during dry weather conditions, ~~except where required based on receiving water monitoring data, aquatic toxicity shall be monitored two times during the first year~~ or as specified in an IMP or CIMP approved by the Executive Officer of the Regional Water Board.
 4. Except as required by an applicable TMDL CMP Monitoring Plan, IMP, or CIMP approved by the Executive Officer of the Regional Water Board, monitoring frequency may be reduced to twice per year, beginning in the second year of monitoring, if pollutant concentrations measured during the first year do not exceed WQBELs, non-storm water Action Levels or water quality standards for other pollutants identified on the CWA section 303(d) List for the receiving water or downstream receiving waters.
 5. ~~Unless required by a TMDL, aquatic toxicity monitoring of significant non-storm water discharges shall only be required when results from a proximate downstream receiving water monitoring have indicated aquatic toxicity during the last two years. If initial monitoring results from an outfall indicate toxicity, aquatic toxicity shall be monitor a second time during the reporting year. Aquatic toxicity monitoring may be reduced to once per year, if monitoring conducted during the first year~~

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~~indicates that the discharge was not toxic. Aquatic toxicity monitoring shall be performed per the procedures described in Part XII of this MRP.~~

- 6.5.** Following two years of monitoring, the Permittee may submit a written request to the Executive Officer of the Regional Water Board to reduce or eliminate monitoring of specified pollutants, based on an evaluation of the monitoring data.

H. Sampling Methods

1. For the purposes of this monitoring program, non-storm water discharges shall be monitored during days when precipitation is < 0.1 inch and those days not less than 3 days after a rain day unless an alternative criterion is provided for in an approved IMP or CIMP. A rain day is defined as those with ≥ 0.1 inch of rain.
2. Flow-weighted composite samples shall be taken for a non-storm water discharge using a continuous sampler, or it shall be taken as a combination of a minimum of 3 sample aliquots, taken in each hour during a 24-hour period, unless the Regional Water Board Executive Officer approves an alternate protocol.

X. NEW DEVELOPMENT/RE-DEVELOPMENT EFFECTIVENESS TRACKING

- A. Each Permittee shall maintain a database providing the following information for each new development/re-development subject to the requirements of Part VI.D.6 of this Order that is approved by the Permittee on or after the effective date of this Order:
1. Name of the Project and Developer,
 2. Project location and map (preferably linked to the GIS storm drain map),
 3. Date of Certificate of Occupancy,
 4. 85th percentile storm event for the project design (inches per 24 hours),
 5. 95th percentile storm event for projects draining to natural water bodies (inches per 24 hours),
 6. Other design criteria required to meet hydromodification requirements for drainages to natural water bodies,
 7. Project design storm (inches per 24-hours),
 8. Project design storm volume (gallons or MGD),
 9. Percent of design storm volume to be retained on site,
 10. Design volume for water quality mitigation treatment BMPs, if any.
 11. If flow through, water quality treatment BMPs are approved, provide the one-year, one-hour storm intensity as depicted on the most recently issued isohyetal map published by the Los Angeles County Hydrologist,

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12. Percent of design storm volume to be infiltrated at an off-site mitigation or groundwater replenishment project site,
13. Percent of design storm volume to be retained or treated with biofiltration at an off-site retrofit project,
14. Location and maps (preferably linked to the GIS storm drain map required in Part VII.A of this MRP) of off-site mitigation, groundwater replenishment, or retrofit sites.
- ~~14-15. Documentation of issuance of requirements to the developer.~~

XI. REGIONAL STUDIES

~~A. Pyrethroid Insecticides Study Requirements~~

- ~~1. Each Permittee shall perform a Pyrethroid Insecticides study to accomplish the following objectives:

 - ~~a. Establish baseline data for major watersheds~~
 - ~~b. Evaluate whether Pyrethroid Insecticide concentrations are at or approaching levels known to be toxic to sediment-dwelling aquatic organisms.

 - ~~i. Determine if Pyrethroids discovered are from urban sources.~~
 - ~~ii. Assess any trends over the permit term.~~~~~~
- ~~2. Each Permittee shall incorporate monitoring for Pyrethroid Insecticides according to the following:

 - ~~a. No later than the second year after the effective date of this Order, monitoring shall begin.~~
 - ~~b. Quality Assurance Project Plan (QAPP) to be submitted to the Regional Water Board Executive Officer for approval 12 months prior to beginning monitoring.~~
 - ~~c. In selecting sites to conduct monitoring for Pyrethroid Insecticides, Permittees shall review existing monitoring programs in the watersheds by other public and private entities, watershed coalitions, and citizen volunteers, so as to complement and not duplicate efforts.~~
 - ~~d. Establish at least two stations along the main stems of each major watershed river that are influenced by urban discharges.~~~~
- ~~3. Each Permittee shall monitor Pyrethroid Insecticides stations according to the following:

 - ~~a. Each Permittee shall monitor one sampling event per station per monitoring year.~~
 - ~~b. Monitoring shall occur after sediment has settled within the waterbody, and safe access can be assured.~~~~

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- ~~c. Sufficient sediment is to be collected at each station in a pre-cleaned glass jar by skimming the upper 1 cm of the sediment column with a steel scoop, and held on ice until returned to the laboratory.~~
- ~~d. Sediment shall be homogenized in the laboratory by hand mixing, then held at 4 °C (toxicity samples) or -20 °C (chemistry samples).~~
- ~~e. All samples taken shall be analyzed for the following Pyrethroids:~~
- ~~(1) bifenthrin~~
 - ~~(2) cyfluthrin~~
 - ~~(3) cypermethrin~~
 - ~~(4) deltamethrin~~
 - ~~(5) esfenvalerate~~
 - ~~(6) lambda-cyhalothrin~~
 - ~~(7) permethrin~~
 - ~~(8) tralomethrin (if laboratory is capable of analyzing for it)~~
- ~~f. Detection limits for all Pyrethroids shall be as close to 1ng/g (dry weight) as reasonably achievable.~~
- ~~g. Each sediment sample is to measure the following:~~
- ~~i. Total organic carbon (TOC).~~
 - ~~ii. All samples shall be tested for toxicity to 7 to 10 day old *Hyalella azteca* according to standard USEPA testing methods.⁴~~
 - ~~iii. Use of the approach described in *Aquatic Toxicity Due to Residential Use of Pyrethroid Insecticides*⁵ for toxicity testing shall be used.~~
- ~~h. Analysis by a laboratory that has performed sediment toxicity testing for Pyrethroid Insecticides is preferred.~~
- ~~i. Monitoring results from each station shall be sent electronically to the Regional Water Board's Storm Water Site at MS4stormwaterRB4@waterboards.ca.gov, no later than 90 days from sample collection date. The sample data transmitted shall be in the most recent update of the Southern California Municipal Storm Water Monitoring Coalition's (SMC) Standardized Data Transfer Formats (SDTFs).~~

⁴ U.S. EPA. *Methods for Measuring the Toxicity and Bioaccumulation of Sediment-Associated Contaminants with Freshwater Invertebrates*; EPA Publication 600/R-99/064; U.S. Environmental Protection Agency: Washington, DC, 2000; 192 pp.

⁵ *Aquatic Toxicity Due to Residential Use of Pyrethroid Insecticides*; Weston, D.P.; Holmes, R.W.; You, J.; Lydy, M.J. *Environ. Sci. Technol.*; (Article); 2005; 39(24); 9780 pp.

- ~~j. If toxicity is attributed to Pyrethroids, then consultation with USEPA, the California Department of Pesticide Regulations, and the California Stormwater Quality Association's (CASQA) pesticides committee (UP3 Project web site), shall be required to obtain relevant information to use in developing the recommendations to mitigate Pyrethroids in the Final Study Report.~~
- ~~k. Final Report for the Pyrethroid Insecticides study shall contain the following:

 - ~~i. Executive summary~~
 - ~~ii. Methods~~
 - ~~iii. Results (including map depicting monitoring stations)~~
 - ~~iv. Discussion~~
 - ~~v. Recommendations to mitigate Pyrethroids.~~~~
- ~~l. The Final Report shall be completed and submitted to the Executive Officer of the Regional Water Board no later than 8 months after completion of the study.~~
- ~~m. The Pyrethroid Insecticides Study requirement may be satisfied by another tributary monitoring program within the Watershed performing a sediment Pyrethroid Insecticides Study that is monitoring to assess pyrethroid concentrations and sediment toxicity, so as to complement other ongoing programs.~~
- ~~n. Permittees can elect to conduct the Pyrethroid Insecticides Study on a jurisdiction, watershed, or countywide scale. If Permittees elect to conduct the study at either a watershed or countywide scale, the study shall be incorporated into an IMP or GIMP and the Permittee shall notify the Regional Water Board Executive Officer of its intent consistent with the notification requirements contained in Section IV.C of this MRP (Integrated Monitoring Plans).~~

B.A. Southern California Stormwater Monitoring Coalition Watershed Monitoring Program

1. The Southern California Stormwater Monitoring Coalition (SMC) Regional Watershed Monitoring Program was initiated in 2008. This program is conducted in collaboration with the Southern California Coastal Water Research Project (SCCWRP), State Water Board's Surface Water Ambient Monitoring Program, three Southern California Regional Water Quality Control Boards (Los Angeles, Santa Ana, and San Diego) and several county storm water agencies (Los Angeles, Ventura, Orange, Riverside and San Diego). SCCWRP acts as the facilitator to organize the program and completes data analysis and report preparation.
2. The SMC monitoring program seeks to coordinate and leverage existing monitoring efforts to produce regional estimates of condition, improve data

comparability and quality assurance, and maximize data availability, while conserving monitoring expenditures. The primary goal of this program is to implement an ongoing, large-scale regional monitoring program for southern California’s coastal streams and rivers. The monitoring program addresses three main questions:

- a. What is the condition of streams in southern California?
 - b. What are the stressors that affect stream condition?; and
 - c. Are conditions getting better or worse?
3. A comprehensive program was designed by the SMC, in which each participating group assesses its local watersheds and then contributes their portion to the overall regional assessment. The program utilizes the following indicators: benthic macroinvertebrate community bioassessment, benthic algal community bioassessment (soft algae and diatoms), riparian wetland evaluation (using California Rapid Assessment Methodology), water chemistry (nutrients and certain pesticides), water toxicity (using *Ceriodaphnia*), and physical habitat. Sampling occurs in 15 coastal southern California watersheds from Ventura to the US-Mexico border, and sites are sampled randomly across three land use types (open space, urban and agriculture). Six sites are sampled per year per watershed, resulting in monitoring of 90 sites per year and 450 sites overall over a five-year period (reaching the statistically desirable target of 30 data points per watershed).
4. To continue to implement the SMC design, each Permittee shall be responsible for supporting the monitoring described at the sites within the watershed management area(s) that overlap with the Permittee’s jurisdictional area. These include six random sites annually in the Santa Monica Bay Watershed Management area and at three random sites annually in the Santa Clara River Watershed (the other three sites are funded by the Ventura County MS4 Permittees). Permittees shall continue to contribute monitoring resources to the San Gabriel River and Los Angeles River Regional Watershed Monitoring Programs (overall, both of these programs fund six sites per year to contribute to the SMC Program).

XII. AQUATIC TOXICITY MONITORING METHODS

- A. Aquatic Toxicity Monitoring as required in Parts VI (Receiving Water Monitoring), VIII (Storm Water Outfall Based Monitoring), and IX (Non-storm Water Outfall Based Monitoring) of this MRP, shall be conducted according to the procedures described in this Part. When the State Water Board’s Policy for Toxicity Assessment and Control is fully approved and in effect, the Regional Water Board Executive Officer may direct the Permittee(s) to replace current toxicity program elements with standardized procedures in the policy.
- B. The Permittee(s) shall collect and analyze samples taken from receiving water monitoring locations and outfall discharges, ~~as soon as possible after sample collection,~~ to evaluate the extent and causes of toxicity in receiving waters.

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B.C. ~~_____ Toxicity samples are to may be flow-weighted composite samples, or grab samples, for wet and dry event sampling (considering holding times, below) and can be collected manually or automatically.~~

C.D. ~~_____ The total sample volume of sample shall be determined both by the specific toxicity test methods to be used and the additional volume necessary for . At a minimum it is suggested to collect 5 gallons for baseline testing, and for Toxicity Identification Evaluation (TIE) studies. Sufficient sample volume shall be collected to perform both the required toxicity tests and TIE studies. The same refrigerated sample showing toxicity shall be used for the TIE, even though the holding time may exceed 72 hours.~~

D.E. ~~_____ Holding Times. All toxicity tests shall be conducted as soon as possible following sample collection. A The 36-hour sample holding time for test initiation shall be targeted. Sample storage (holding time) time shall not exceed However, no more than 72 hours shall elapse before the conclusion of (from sample collection and test initiation through lab processing).~~

E.F. ~~_____ Definition of Chronic Toxicity. Chronic toxicity measures a sublethal effect (e.g., reduced growth, reproduction) to experimental test organisms exposed to an effluent or receiving waters compared to that of the control organisms. If the State Water Board adopts the Policy for Toxicity Assessment and Control that outlines the use of the Test of Significant Toxicity (TST), modifying the current hypothesis test methods, the Regional Water Board Executive Officer will revise the Monitoring and Reporting Program, as applicable, to reflect these changes. These revisions would be made as soon as practicable following USEPA approval of the new state policy.~~

F.G. ~~_____ Acute Toxicity Chronic Toxicity Receiving Water and Outfall Effluent Monitoring Programs.~~

1. ~~Test Freshwater Test Species and Methods. Acute Toxicity: Acute toxicity is a measure of primarily lethal effects that occur over a 96-hour period. Acute toxicity shall be measured in percent survival measured in undiluted (100%) sample (receiving water or discharge effluent).~~

~~If samples are collected in receiving waters with salinity <1 ppt, or from outfalls discharging to receiving waters with salinity <1 ppt, then the Permittee(s) shall conduct the following critical life stage chronic toxicity tests on undiluted samples in accordance with species and short-term test methods in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002; Table IA, 40 CFR Part 136). In no case shall the following test species be substituted with another organism unless written authorization from the Regional Water Board Executive Officer is received.~~

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- i. A static renewal toxicity test with the fathead minnow, *Pimephales promelas* (Larval Survival and Growth Test Method 1000.0⁶).
- ii. A static renewal toxicity test with the daphnid, *Ceriodaphnia dubia* (Survival and Reproduction Test Method 1002.0⁵).
- iii. A static renewal toxicity test with the green alga, *Selenastrum capricornutum* (also named *Raphidocelis subcapitata*) (Growth Test Method 1003.0).

1. _____

- a. ~~The average survival in the undiluted sample for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, and~~
 - b. ~~No single test shall produce less than 70% survival.~~
2. Marine and Estuarine Test Species and Methods. Acute Toxicity Receiving Water/Effluent Monitoring Program.

2. If samples are collected in receiving waters with salinity >1 ppt, or from outfalls discharging to receiving waters with salinity >1 ppt, then the Permittee(s) shall conduct the following critical life stage chronic toxicity tests on undiluted samples in accordance with species and short-term test methods in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, 1995). Artificial sea salts shall be used to increase sample salinity. In no case shall the following test species be substituted with another organism unless written authorization from the Regional Water Board Executive Officer is received.

- a. A static renewal toxicity test with the topsmelt, *Atherinops affinis* (Larval Survival and Growth Test Method 1006.01⁵); Method. The Permittee(s) shall conduct acute toxicity tests (96-hour static renewal toxicity tests) on water samples, by methods specified in 40 CFR Part 136 which cites USEPA's *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fifth Edition, October 2002, USEPA, Office of Water, Washington D.C. (EPA/821/R-02/012) or a more recent edition to ensure compliance.
- b. A static non-renewal toxicity test with the purple sea urchin, *Strongylocentrotus purpuratus* (Fertilization Test Method 1008.0); and Test Species. The fathead minnow, *Pimephales promelas* (Acute Toxicity Test Method 2000.0), shall be used as the test species for fresh water and the topsmelt, *Atherinops affinis*, shall be used as the test species in brackish water. However, if the salinity of the receiving water is between 1 to 32 parts per thousand (ppt), the Permittee(s) may have the option of

⁶ Daily observations for mortality make it possible to calculate acute toxicity for desired exposure periods (e.g., a 7-day acute endpoint).

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~~using the inland silverside, *Menidia beryllina* (Acute Toxicity Test Method 2006.0), instead of the topsmelt. The method for topsmelt (Larval Survival and Growth Test Method 1006.0) is found in USEPA's Short-term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to West Coast Marine and Estuarine Organisms, First Edition, August 1995 (EPA/600/R-95/136). The Pacific mysid shall be used as the invertebrate test species for marine water, and the water flea (*Ceriodaphnia dubia*, *Daphnia pulex* or *Daphnia magna*) shall be used as the invertebrate test species in fresh water.~~

- ~~c. A static non-renewal toxicity test with the giant kelp, *Macrocystis pyrifera* (Germination and Growth Test Method 1009.0). Alternate Reporting. For the acute toxicity testing with topsmelt, the Permittee(s) may elect to report the results or endpoint from the first 96 hours of the chronic toxicity test as the results of the acute toxicity test, using USEPA's August 1995 method (EPA/600/R-95/136) to conduct the chronic toxicity test.~~

3. Test Species Sensitivity Screening.

To determine the most sensitive test species, the Permittee(s) shall conduct two wet weather and two dry weather toxicity tests with a vertebrate, an invertebrate, and a plant. After this screening period, subsequent monitoring shall be conducted using the most sensitive test species. Alternatively, if a sensitive test species has already been determined, or if there is prior knowledge of potential toxicant(s) and a test species is sensitive to such toxicant(s), then monitoring shall be conducted using only that test species. Sensitive test species determinations shall also consider the most sensitive test species used for proximal receiving water monitoring. After the screening period, subsequent monitoring shall be conducted using the most sensitive test species. Rescreening shall occur in the fourth year of the permit term.

- ~~e. 4. Chronic toxicity test biological endpoint data shall be analyzed using the Test of Significant Toxicity t-test approach specified in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (U.S. Environmental Protection Agency, Office of Wastewater Management, Washington, DC. EPA 833-R-10-003, 2010.) For this monitoring program, the critical chronic instream waste concentration (IWC) is set at 100% receiving water for receiving water samples and 100% effluent for wet- and dry-weather outfall samples. A 100% receiving water/outfall effluent sample and a control shall be tested.~~
- ~~i. Toxicity Identification Evaluation. The Permittee(s) shall immediately begin a Toxicity Identification Evaluation (TIE) and implement the Initial Investigation Toxicity Reduction Evaluation (TRE) workplan if any of the results are less than 70% survival or the average survival in the undiluted sample for any three (3) consecutive 96-hour static or continuous flow bioassay tests is less than 90%.~~

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G.H. Quality Assurance. Chronic Toxicity

1. If the receiving water or outfall effluent test does not meet all test acceptability criteria (TAC) specified in the test methods manuals (*Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002) and *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, 1995)), then the Permittee(s) must re-sample and re-test at the earliest time possible. ~~Definition of Chronic Toxicity. Chronic toxicity measures a sublethal effect (e.g., reduced growth, reproduction) to experimental test organisms exposed to an effluent or receiving waters compared to that of the control organisms. Chronic toxicity shall be measured in TU_c, where TU_c = 100/NOEC. The No Observable Effect Concentration (NOEC) is expressed as the maximum percent effluent concentration that causes no observable effect on test organisms, as determined by the results of a critical life stage toxicity test.~~
2. Control water, including brine controls, shall be laboratory water prepared and used as specified in the test methods manuals. ~~This Order includes a chronic toxicity trigger defined as an exceedance of 1.0 TU_c in a critical life stage test of 100% effluent. (The monthly median for chronic toxicity of 100% effluent shall not exceed 1 TU_c in a critical life stage test.)~~
3. If organisms are not cultured in-house, then concurrent testing with a reference toxicant shall be conducted. If organisms are cultured in-house, then monthly reference toxicant testing is sufficient. Reference toxicant tests and effluent toxicity tests shall be conducted using the same test conditions (e.g., same test duration, etc.). ~~Chronic Toxicity Effluent Monitoring Program.~~
 - a. Test Species and Methods:
 - i. ~~The Permittee(s) shall conduct critical life stage chronic toxicity tests on 24-hour composite 100% effluent or receiving water grab samples.~~
 - ii. ~~For freshwater discharge Permittee(s) shall conduct the chronic toxicity test in accordance with USEPA's *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms Fourth Edition, October 2002*, (EPA/821/R-02/013), or a more recent edition.~~
 - iii. ~~For brackish effluent, the Permittee(s) shall conduct the chronic toxicity test in accordance with USEPA's *Short-Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to West Coast Marine and Estuarine Organisms, First Edition, August 1995*, (EPA/600/R-95/136), or *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, Third Edition, October 2002*, (EPA/821-R-02-014), or a more recent edition.~~
 - iv. ~~The Permittee(s) shall conduct tests as follows: with a vertebrate, an invertebrate, and a plant for the first three suites of tests. After the screening period, monitoring shall be conducted using the most sensitive species.~~

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~~v. Re-screening is required every 24 months. The Permittee(s) shall re-screen with the three species listed above and continue to monitor with the most sensitive species. If the first suite of re-screening tests demonstrates that the same species is the most sensitive one, then the re-screening does not need to include more than one suite of tests. If a different species is the most sensitive one or if there is ambiguity then the Permittee(s) shall proceed with suites of screening tests for a minimum of three, but not to exceed five suites.~~

~~vi. In brackish waters, the presence of chronic toxicity may be estimated as specified using West Coast marine organisms according to USEPA's Short-Term Methods for Estimating Chronic Toxicity of Effluent and Receiving Waters to West Coast Marine and Estuarine Organisms, August 1995 (EPA/600/R-95/136), or a more recent edition.~~

~~vii. After the screening period, subsequent monitoring shall be conducted using the most sensitive species.~~

~~viii. Outfall samples shall be collected before discharge to the receiving water.~~

~~4. Chronic Toxicity Identification Evaluation.~~

~~i.3. If the chronic toxicity of the effluent exceeds 1.0 TUC, the Permittee(s) shall immediately implement the Initial Investigation TRE workplan. The Permittee(s) shall ensure that they receive results of a failing chronic toxicity test within 24 hours of the completion of the test and the additional tests shall begin within 5 business days of the receipt of the result.~~

H.I. Toxicity Identification Evaluation (TIE). Quality Assurance

- ~~1. A toxicity test sample is immediately subject to TIE procedures to identify the toxic chemical(s), if either the survival or sublethal endpoint demonstrates a Percent Effect value equal to or greater than 50% at the IWC. Percent Effect is defined as the effect value—denoted as the difference between the mean control response and the mean IWC response, divided by the mean control response—multiplied by 100. Concurrent testing with a reference toxicant shall be conducted. Reference toxicant tests shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration, etc).~~
- ~~2. A TIE shall be performed to identify the causes of toxicity using the same species and test method and, as guidance, U.S. EPA manuals: *Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I* (EPA/600/6-91/005F, 1992); *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/080, 1993); *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/081, 1993); and *Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document* (EPA/600/R-96-054, 1996). If either the reference toxicant test or receiving water or effluent test does not meet all test~~

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~~acceptability criteria (TAC) as specified in the test methods manuals (EPA/600/4-91/002 and EPA/821-R-02-014), then the Permittee(s) must re-sample and re-test at the earliest time possible.~~

- ~~3. The TIE should be conducted on the test species demonstrating the most sensitive toxicity response at a sampling station. A TIE may be conducted on a different test species demonstrating a toxicity response with the caveat that once the toxicant(s) are identified, the most sensitive test species triggering the TIE shall be further tested to verify that the toxicant has been identified and addressed. Control and dilution water should be receiving water (if non-toxic) or laboratory water, as appropriate, as described in the manual. If the dilution water used is different from the water the test species are grown in (culture water), a second control using culture water shall be used.~~

- ~~3.4. A TIE Prioritization Metric (see Appendix 5 in SMC Model Monitoring Program) may be utilized to rank sites for TIEs.~~

~~I.J. Toxicity Reduction Evaluation (TRE). Preparation of an Initial Investigation TRE Workplan~~

- ~~1. When a toxicant or class of toxicants is identified through a TIE conducted at a receiving water monitoring station, Permittees shall analyze for the toxicant(s) during the next scheduled sampling event in the discharge from the outfall(s) upstream of the receiving water location.~~
- ~~2. If the toxicant is present in the discharge from the outfall at levels above the applicable receiving water limitation, a TRE shall be performed for that toxicant.~~
- ~~4.3. The TRE shall include all reasonable steps to identify the source(s) of toxicity and discuss appropriate BMPs to eliminate the causes of toxicity. No later than 30 days after the source of toxicity and appropriate BMPs are identified, the Permittee(s) shall submit a TRE Corrective Action Plan to the Regional Water Board Executive Officer for approval. At minimum, the plan shall include a discussion of the following: The Permittee(s) shall prepare and submit a copy of the Permittee(s)'s initial investigation TRE workplan to the Executive Officer of the Regional Water Board for approval within 90 days of the effective date of this Order. If the Executive Officer does not disapprove the workplan within 60 days, the workplan shall become effective. The Permittee(s) shall use USEPA manuals EPA/600/2-88/070 (industrial) or EPA/833B-99/002 (municipal) as guidance. This workplan shall describe the steps the Permittee(s) intends to follow if toxicity is detected, and should include, at a minimum:~~
- ~~a. The potential sources of pollutant(s) causing toxicity. A description of the investigation and evaluation techniques that will be used to identify potential causes and sources of toxicity, effluent variability, and MCM and/or BMP efficiency.~~
 - ~~b. A list of municipalities and agencies that may have jurisdiction over sources of pollutant(s) causing toxicity. A description of the Permittee(s)~~

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~~methods for minimizing the toxicity of storm water and non-storm water discharges.~~

- ~~c. Recommended BMPs to reduce the pollutant(s) causing toxicity. If a TIE is necessary, the name or position title of who would conduct the TIEs (i.e., an in-house expert or an outside contractor).~~
- ~~d. Proposed post-construction control measures to reduce the pollutant(s) causing toxicity.~~
- ~~e. Follow-up monitoring to demonstrate that the toxicants have been reduced or eliminated toxicity has been removed.~~
- ~~e.4. The TRE process shall be coordinated with TMDL development and implementation (i.e., if a TMDL for 4,4'-DDD is being implemented when a TRE for 4,4'-DDD is required, then efforts shall be coordinated to avoid overlap).~~

J.K. Chronic Toxicity Reporting Steps in TRE and TIE Procedures

- ~~1. Aquatic toxicity monitoring results submitted to the Regional Water Board shall be consistent with the requirements identified in Part XIV.L and M and Part XVIII.A.5 and A.7 of the MRP. The Regional Water Board shall be notified no later than 30 days from completion of each aspect of the analysis for TIEs/TREs. If results of the implementation of the facility's initial investigation TRE workplan indicate the need to continue the TRE/TIE, the Permittee(s) shall expeditiously develop a more detailed TRE workplan for submittal to the Regional Water Board Executive Officer within 30 days of completion of the initial investigation TRE. The detailed workplan shall include, but not be limited to:~~
- ~~1.2. The Annual Report in Part XVIII of the MRP shall include:~~
 - ~~a. A full laboratory report for each chronic toxicity test prepared according to the appropriate test methods manual chapter on Report Preparation, including: Further actions to investigate and identify the cause of toxicity;~~
 - ~~i. The chronic toxicity test results for the t-test, reported as "Pass" or "Fail", and the "Percent Effect".~~
 - ~~ii. The dates of sample collection and initiation of each toxicity test.~~
 - ~~iii. Test species with biological endpoint values for each concentration tested.~~
 - ~~iv. Reference toxicant test results.~~
 - ~~v. Water quality measurements for each toxicity test (e.g., pH, dissolved oxygen, temperature, conductivity, hardness, salinity, chlorine, ammonia).~~
 - ~~vi. TRE/TIE testing results.~~
 - ~~vii. A printout of CETIS (Comprehensive Environmental Toxicity Information System) program results.~~

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- ~~a-b.~~ All results for receiving water or outfall effluent parameters monitored concurrently with the toxicity test. Actions the Permittee(s) will take to mitigate the impact of the discharge and prevent the recurrence of toxicity;
- ~~c.~~ TIEs (Phases I, II, and III) that have been completed or are being conducted, by monitoring station. A schedule for these actions.
- ~~b-d.~~ The development, implementation, and results for each TRE Corrective Action Plan, beginning the year following the identification of each pollutant or pollutant class causing chronic toxicity.
- ~~2.~~ The following section summarizes the stepwise approach used in conducting the TRE:
- ~~a.~~ Step 1 includes basic data collection. Data collected for the accelerated monitoring requirements may be used to conduct the TRE;
- ~~b.~~ Step 2 evaluates optimization of the Permittee(s) Minimum Control Measures (MCMs) in reducing the toxicity of the storm water and non-storm water discharges to the MS4 system.
- ~~c.~~ If Steps 1 and 2 are unsuccessful, Step 3 implements a TIE and employment of all reasonable efforts using currently available TIE methodologies. The objective of the TIE shall be to identify the substance or combination of substances causing the observed toxicity;
- ~~d.~~ Assuming successful identification or characterization of the toxicant(s), Step 4 evaluates final effluent treatment options;
- ~~e.~~ Step 5 evaluates options for reducing toxicity of storm water and/or non-storm water discharges to the MS4 system; and,
- ~~f.~~ Step 6 consists of confirmation once a toxicity control method has been implemented.
- ~~3.~~ Many recommended TRE elements parallel source control, pollution prevention, and storm water control program minimum control measures and BMPs. To prevent duplication of efforts, evidence of compliance with those requirements may be sufficient to comply with TRE requirements. By requiring the first steps of a TRE to be accelerated testing and review of the Permittee(s) TRE workplan, a TRE may be ended in its early stages. All reasonable steps shall be taken to reduce toxicity to the required level. The TRE may be ended at any stage if monitoring indicates there are no longer toxicity (six consecutive chronic toxicity test results are less than or equal to 1.0 TUC or six consecutive acute toxicity test results are greater than 90% survival).
- ~~4.~~ The Permittee(s) shall initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. The Permittee(s) shall use the USEPA acute manual, chronic manual, EPA/600/6-91/005F (Phase I)/EPA/600/R-96-054 (for marine), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III), as guidance.

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- ~~5. If a TRE/TIE is initiated prior to completion of the accelerated testing, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE, as determined by the Regional Water Board Executive Officer.~~
- ~~6. Toxicity tests conducted as part of a TRE/TIE may also be used for compliance determination, if appropriate.~~
- ~~7. The Regional Water Board recognizes that toxicity may be episodic and identification of causes of and reduction of sources of toxicity may not be successful in all cases. Consideration of enforcement action by the Regional Water Board will be based, in part, on the Permittee(s)'s actions and efforts to identify and control or reduce sources of consistent toxicity.~~

~~K. Ammonia Removal~~

- ~~1. Except with prior approval from the Executive Officer of the Regional Water Board, ammonia shall not be removed from bioassay samples. The Permittees must demonstrate the receiving water or effluent toxicity is caused by ammonia because of increasing test pH when conducting the toxicity test. It is important to distinguish the potential toxic effects of ammonia from other pH sensitive chemicals, such as certain heavy metals, sulfide, and cyanide. The following may be steps to demonstrate that the toxicity is caused by ammonia and not other toxicants before the Executive Officer would allow for control of pH in the test.

 - ~~a. There is consistent toxicity in the effluent and the maximum pH in the toxicity test is in the range to cause toxicity due to increased pH.~~
 - ~~b. Chronic ammonia concentrations in the effluent are greater than 4 mg/L total ammonia.~~
 - ~~c. Conduct graduated pH tests as specified in the toxicity identification evaluation methods. For example, mortality should be higher at pH 8 and lower at pH 6.~~
 - ~~d. Treat the effluent with a zeolite column to remove ammonia. Mortality in the zeolite treated effluent should be lower than the non-zeolite treated effluent. Then add ammonia back to the zeolite-treated samples to confirm toxicity due to ammonia.~~~~
- ~~2. When it has been demonstrated that toxicity is due to ammonia because of increasing test pH, pH may be controlled using appropriate procedures which do not significantly alter the nature of the effluent, after submitting a written request to the Regional Water Board, and receiving written permission expressing approval from the Executive Officer of the Regional Water Board.~~

~~L. Reporting~~

- ~~1. The Permittee(s) shall submit a full report of the toxicity test results, including any accelerated testing conducted during the month as required by this Order. Test results shall be reported as % survival for acute toxicity test~~

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- ~~results with the self monitoring reports (SMR) for the month in which the test is conducted. If an initial investigation indicates the source of toxicity and accelerated testing is unnecessary, then those results also shall be submitted with the SMR for the period in which the investigation occurred.~~
- ~~2. The full report shall be submitted on or before the end of the month in which the SMR is submitted.~~
 - ~~3. The full report shall consist of:

 - ~~a. The results;~~
 - ~~b. The dates of sample collection and initiation of each toxicity test;~~
 - ~~c. The acute toxicity average limit or chronic toxicity limit or trigger; and~~
 - ~~d. The printout of the ToxCalc or Comprehensive Environmental Toxicity Information System (CETIS) program results.~~~~
 - ~~4. Test results for toxicity tests also shall be reported according to the appropriate manual chapter on Report Preparation and shall be attached to the SMR. Routine reporting shall include, at a minimum, as applicable, for each test:

 - ~~a. Sample date(s);~~
 - ~~b. Test initiation date;~~
 - ~~c. Test species;~~
 - ~~d. End point values for each dilution (e.g., number of young, growth rate, percent survival);~~
 - ~~e. LC₅₀ value(s) in percent effluent;~~
 - ~~f. TU_a values $\left(TU_a = \frac{100}{LC_{50}}\right)$;~~
 - ~~g. IC₁₅, IC₂₅, IC₄₀ and IC₅₀ values in percent effluent;~~
 - ~~h. NOEC value(s) in percent effluent;~~
 - ~~i. TU_c values $\left(TU_c = \frac{100}{NOEC}\right)$;~~
 - ~~j. Mean percent mortality (+standard deviation) after 96 hours in 100% effluent (if applicable);~~
 - ~~k. No Observable Effect Concentration (NOEC) and Lowest Observable Effect Concentration (LOEC) values for reference toxicant test(s);~~
 - ~~l. IC₂₅ value for reference toxicant test(s);~~
 - ~~m. Any applicable charts; and~~
 - ~~n. Available water quality measurements for each test (e.g., pH, dissolved oxygen (D.O.), temperature, conductivity, hardness, salinity, ammonia).~~~~

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~~5. Monitoring results submitted to the Regional Water Board shall be consistent with the requirements identified in Part XVIII.A.5 and Part XVIII.A.7 of this MRP.~~

~~6. The Permittee(s) shall notify this Regional Water Board of any toxicity exceedance of the limit or trigger by telephone or electronically within 24 hours of receipt of the results, followed by a written report within 14 calendar days of receipt of the results. The verbal or electronic notification shall include the exceedance and the plan the Permittee(s) has taken or will take to investigate and correct the cause(s) of toxicity. It may also include a status report on any actions required by the permit, with a schedule for actions not yet completed. If no actions have been taken, the reasons shall be given~~

XIII. SPECIAL STUDIES

- A. Each Permittee shall be responsible for conducting special studies required in an effective TMDL or an approved TMDL ~~CMP~~ Monitoring Plan applicable to a watershed that transects its political boundary.

XIV. STANDARD MONITORING AND REPORTING PROVISIONS

- A. All monitoring and reporting activities shall meet the following requirements.
1. Monitoring and Records [40 CFR section 122.41(j)(1)]
 - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - b. Monitoring and Records [40 CFR section 122.41(j)(2)] [California Water Code § 13383(a)]
 - i. Permittees shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the Report of Waste Discharge (ROWD) and application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report, or application. This period may be extended by request of the Regional Water Board Executive Officer or USEPA at any time.
 - c. Monitoring and Records [40 CFR section 122.421(j)(3)]
 - i. Records of monitoring information shall include:
 1. The date, time of sampling or measurements, exact place, weather conditions, and rain fall amount.
 2. The individual(s) who performed the sampling or measurements.
 3. The date(s) analyses were performed.
 4. The individual(s) who performed the analyses.
 5. The analytical techniques or methods used.

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6. The results of such analyses.
 7. The data sheets showing toxicity test results.
- d. Monitoring and Records [40 CFR section 122.241(j)-(4)]. All monitoring, sampling, sample preservation, and analyses must be conducted according to test procedures approved under 40 CFR Part 136 for the analysis of pollutants, unless another test procedure is required under 40 CFR subchapter N or O or is otherwise specified in this Order for such pollutants. If a particular Minimum Level (ML) is not attainable in accordance with procedures set forth in 40 CFR Part 136, the lowest quantifiable concentration of the lowest calibration standard analyzed by a specific analytical procedure may be used instead.
 - e. Monitoring and Records [40 CFR section 122.41(j)(5)]. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this Order shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or both.
- B. All chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory:
 1. Certified for such analyses by an appropriate governmental regulatory agency.
 2. Participated in "Intercalibration Studies" for storm water pollutant analysis conducted by the SMC.⁷
 3. Which performs laboratory analyses consistent with the storm water monitoring guidelines as specified in, the *Stormwater Monitoring Coalition Laboratory Guidance Document*, 2nd Edition R. Gossett and K. Schiff (2007), and its revisions.
 - C. For priority toxic pollutants that are identified in the CTR (65 Fed. Reg. 31682), the MLs published in Appendix 4 of the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California* (SIP) shall be used for all analyses, unless otherwise specified.
 - D. The Monitoring Report shall specify the analytical method used, the Method Detection Level (MDL) and the ML for each pollutant. For the purpose of reporting compliance with numerical limitations, performance goals, and

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⁷ The 'Intercalibration Studies' are conducted periodically by the SMC to establish a consensus based approach for achieving minimal levels of comparability among different testing laboratories for storm water samples to minimize analytical procedure bias. Stormwater Monitoring Coalition Laboratory Document, Technical Report 420 (2004) and subsequent revisions and augmentations.

receiving water limitations, analytical data shall be reported with one of the following methods, as appropriate:

1. An actual numerical value for sample results greater than or equal to the ML.
 2. "Not-detected (ND)" for sample results less than the laboratory's MDL with the MDL indicated for the analytical method used.
 3. "Detected, but Not Quantified (DNQ)" if results are greater than or equal to the laboratory's MDL but less than the ML. The estimated chemical concentration of the sample shall also be reported. This is the concentration that results from the confirmed detection of the substance by the analytical method below the ML value.
- E.** For priority toxic pollutants, if the Permittee can demonstrate that a particular ML is not attainable, in accordance with procedures set forth in 40 CFR Part 136, the lowest quantifiable concentration of the lowest calibration standard analyzed by a specific analytical procedure (assuming that all the method specified sample weights, volumes, and processing steps have been followed) may be used instead of the ML listed in Appendix 4 of the SIP. The Permittee must submit documentation from the laboratory to the Regional Water Board Executive Officer for approval prior to raising the ML for any constituent.
- F. Monitoring Reports [40 CFR § 122.41(I)(4)(ii)].**
1. If a Permittee monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR Part 136, or another method specified in this Order, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the Annual Monitoring Reports.
- G. Monitoring Reports [40 CFR § 122.41(I)(4)(iii)]**
1. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order.
- H.** If no flow occurred during the reporting period, then the Monitoring Report shall, so state.
- I.** The Regional Water Board or its Executive Officer, consistent with 40 CFR section 122.41, may approve changes to the Monitoring and Reporting Program, after providing the opportunity for public comment, either:
1. By request of a Permittee or by an interested person after submittal of the Monitoring Report. Such request shall be in writing and filed not later than 60 days after the Monitoring Report submittal date, or
 2. As deemed necessary by the Regional Water Board Executive Officer, following notice to the Permittees.
- J.** Permittees must provide a copy of the Standard Operation Procedures (SOPs) for the Monitoring and Reporting Program No. CI ~~XXXX~~ to the Regional Water Board upon request. The SOP will consist of five elements: Title page, Table of Contents, Procedures, Quality Assurance/ Quality Control (QA/ QC), and

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References. Briefly describe the purpose of the work or process, including any regulatory information or standards that are appropriate to the SOP process, and the scope to indicate what is covered. Denote what sequential procedures should be followed, divided into significant sections; e.g., possible interferences, equipment needed, equipment/instrument maintenance and calibration, personnel qualifications, and safety considerations. Describe QA/ QC activities, and list any cited or significant references.

- K.** When monitoring cannot be performed to comply with the requirements of this Order due to circumstances beyond a Permittee's control, then within two working days, the following shall be submitted to the Regional Water Board Executive Officer:
1. Statement of situation.
 2. Explanation of circumstance(s) with documentation.
 3. Statement of corrective action for the future.
- L.** Results of monitoring from each receiving water or outfall based monitoring station conducted in accordance with the Standard Operating Procedure submitted under Standard Provision 14 of this MRP shall be sent electronically to the Regional Water Board's Storm Water site at MS4stormwaterRB4@waterboards.ca.gov, ~~no later than 90 days from sample collection dates~~ semi-annually, highlighting exceedances of receiving water limitations to implement TMDL provisions and Basin Plan water quality objectives, including California Toxic Rule continuous maximum concentration (CMC) criteria for all test results, with corresponding sampling dates per receiving water monitoring station. The sample data transmitted shall be in the most recent update of the Southern California Municipal Storm Water Monitoring Coalition's (SMC) Standardized Data Transfer Formats (SDTFs).
- M.** When monitoring data provides evidence that a storm water or non-storm water discharge has caused or contributed to an exceedance of a WQBEL, a non-storm water action level, or ~~exhibits aquatic toxicity~~, the Permittee shall submit notify notification to the Regional Water Board in writing electronically within 30 days on a semi-annual basis of the determination and no later than 60 days after receipt of the monitoring data.

XV. ANNUAL REPORT SUBMITTAL TIMELINES

- A.** Each Permittee or group of Permittees shall submit by December 15th of each year beginning in 2013, an Annual Report to the Regional Water Board Executive Officer in the form of a one hard copy and three compact disks (CD) (or equivalent electronic format).

XVI. ANNUAL REPORTING REQUIREMENT OBJECTIVES

B-A. _____ The annual reporting process is intended to meet the following objectives.

1. Present summary information that allows the Regional Water Board to assess:

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- a. Each Permittee’s participation in one or more Watershed Management Programs.
 - b. The impact of each Permittee(s) storm water and non-storm water discharges on the receiving water.
 - c. Each Permittee’s compliance with receiving water limitations, numeric water quality-based effluent limitations, and non-storm water action levels.
 - d. The effectiveness of each Permittee(s) control measures in reducing discharges of pollutants from the MS4 to receiving waters.
 - e. Whether the quality of MS4 discharges and the health of receiving waters is improving, staying the same, or declining as a result watershed management program efforts, and/or TMDL implementation measures, or other Minimum Control Measures.
 - f. Whether changes in water quality can be attributed to pollutant controls imposed on new development, re-development, or retrofit projects.
2. Present detailed data and information in an accessible format to allow the Regional Water Board to verify conclusions presented in a Permittee’s summary information.
 3. Provide the Permittee(s) a forum to discuss the effectiveness of its past and ongoing control measure efforts and to convey its plans for future control measures.
 4. Present data and conclusions in a transparent manner so as to allow review and understanding by the general public.
 5. Focus each Permittee’s reporting efforts on watershed condition, water quality assessment, and an evaluation of the effectiveness of control measures.

XVII. WATERSHED SUMMARY INFORMATION, ORGANIZATION AND CONTENT

- A. Each Permittee shall include the information requested in A.1 through A.3 below in its odd year Annual Report (e.g., Year 1, 3, 5). The requested information shall be provided for each watershed within the Permittee’s jurisdiction. Alternatively, permittees participating in a Watershed Management Program may provide the requested information through the development and submission of a Watershed Management Program plan and any updates thereto.
 1. **Watershed Management Area.** Where a Permittee has individually or collaboratively developed a Watershed Management Program Plan (WMPP) as described in Part VI.C of this Order, reference to the Watershed Management Program plan and any revisions thereto may suffice for baseline information regarding the Watershed Management Area.
 - a. The following information shall be included for each Watershed Management Area within the Permittee(s) jurisdiction, where not included in a WMPP:

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- i. A description of effective TMDLs, applicable WQBELs and receiving water limitations, and implementation and reporting requirements, and compliance dates
 - ii. CWA section 303(d) listings of impaired waters not addressed by TMDLs
 - iii. Results of regional bioassessment monitoring
 - ~~iv. Results of regional Pyrethroid studies, if any~~
 - ~~v. iv.~~ A description of known hydromodifications to receiving waters and a description, including locations, of natural drainage systems
 - ~~vi. v.~~ Description of groundwater recharge areas including number and acres
 - ~~vii. vi.~~ Maps and/or aerial photographs identifying the location of ESAs, ASBS, natural drainage systems, and groundwater recharge areas
- 2. Subwatershed (HUC-12) Description.** The following information shall be included for each Subwatershed (HUC-12) within the Permittee(s) jurisdiction. Where a Permittee has individually or collaboratively developed a WMPP as described in Part VI.C of this Order, reference to the WMPP and any revisions thereto may suffice for baseline information regarding the subwatershed (HUC-12) descriptions, where the required information is already included in the WMPP. The summary information describing the subwatershed shall include the following information:
- a. Description including HUC-12 number, name and a list of all tributaries named in the Basin Plan
 - b. Land Use map of the HUC-12 subwatershed
 - c. 85th percentile, 24-hour rainfall isohyetal map for the subwatershed
 - d. One-year, one-hour storm intensity isohyetal map for the subwatershed
 - e. MS4 map for the subwatershed, including major MS4 outfalls and all low-flow diversions
- 3. Description of the Permittee(s) Drainage Area within the Subwatershed.** Where a Permittee has individually or collaboratively developed a WMPP as described in Part VI.C of this Order, reference to the WMPP and any revisions thereto may suffice for baseline information regarding the Permittee's Drainage Area within the subwatershed (HUC-12), where the required information is already included in the Watershed Management Program. The following information shall be included for each jurisdiction within the Subwatershed (HUC-12):
- a. A subwatershed map depicting the Permittee(s) jurisdictional area and the MS4, including major outfalls (with identification numbers), and low flow diversions (with identifying names or numbers) located, within the Permittee's jurisdiction.

- b. Provide the estimated baseline percent of effective impervious area (EIA) within the Permittee(s) jurisdictional area as existed at the time that this Order became effective.

XVIII. ANNUAL ASSESSMENT AND REPORTING

- A. Each Permittee or group of Watershed Permittees shall include the information requested in A.1 through A.7 below in its Annual Report. The requested information shall be provided for each watershed within the Permittee’s jurisdiction. Each Permittee shall format its Annual Report to align with the reporting requirements identified in Parts A.1 through A.7 below.

Annual Reports submitted on behalf of a group of Watershed Permittees shall clearly identify all data collected and strategies, control measures, and assessments implemented by each Permittee within its jurisdiction as well as those implemented by multiple Permittees on a watershed scale.

- 1. **Storm Water Control Measures.** Each Permittee shall make all reasonable efforts to determine, compile, analyze, and summarize the following information.

- a. Estimated cumulative change in percent EIA since the effective date of this Order and, if possible, the estimated change in the storm water runoff volume during the 85th percentile storm event.
- b. Summary of New Development/Re-development Projects constructed within the Permittee(s) jurisdictional area during the reporting year.
- c. Summary of Retrofit Projects that reduced or disconnected impervious area from the MS4 during the reporting year.
- d. Summary of other projects designed to intercept storm water runoff prior to discharge to the MS4 during the reporting year.
- e. For the projects summarized above in 1.b through 1.d, estimate the total runoff volume retained on site by the implemented projects.
- f. Summary of actions taken in compliance with TMDL implementation plans or approved Watershed Management Programs to implement TMDL provisions in Part VI.E and Attachments L-R of this Order.
- g. Summary of riparian buffer/wetland restoration projects completed during the reporting year. For riparian buffers include width, length and vegetation type; for wetland include acres restored, enhanced or created.
- h. Summary of other Minimum Control Measures implemented during the reporting year, as the Permittee deems relevant.
- i. Status of all multi-year efforts that were not completed in the current year and will therefore continue into the subsequent year(s). Additionally, if any of the requested information cannot be obtained, the Permittee shall provide a discussion of the factor(s) limiting its acquisition and steps that will be taken to improve future data collection efforts.

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2. Effectiveness Assessment of Storm Water Control Measures

- a. Rainfall summary for the reporting year. Summarize the number of storm events, highest volume event (inches/24 hours), highest number of consecutive days with measureable rainfall, total rainfall during the reporting year compared to average annual rainfall for the subwatershed. Precipitation data shall be obtained from Los Angeles County Department of Public Works rain gauge stations available at <http://www.ladpw.org/wrd/precip/>.
- b. Provide a summary table describing rainfall during storm water outfall and wet-weather receiving water monitoring events. The summary description shall include the date, time that the storm commenced and the storm duration in hours, the highest 15-minute recorded storm intensity (converted to inches/hour), the total storm volume (inches), and the time between the storm event sampled and the end of the previous storm event.
- c. Where control measures were designed to reduce impervious cover or storm water peak flow and flow duration, provide hydrographs or flow data of pre- and post-control activity for the 85th percentile, 24-hour rain event, if available.
- d. For natural drainage systems, develop a reference watershed flow duration curve and compare it to a flow duration curve for the subwatershed under current conditions.
- e. Provide an assessment as to whether the quality of storm water discharges as measured at designed outfalls is improving, staying the same or declining. The Permittee may compare water quality data from the reporting year to previous years with similar rainfall patterns, conduct trends analysis, or use other means to develop and support its conclusions (e.g., use of non-storm water action levels or municipal action levels as provided in Attachment G of this Order).
- f. Provide an assessment as to whether wet-weather receiving water quality within the jurisdiction of the Permittee is improving, staying the same or declining, when normalized for variations in rainfall patterns. The Permittee may compare water quality data from the reporting year to previous years with similar rainfall patterns, conduct trends analysis, draw from regional bioassessment studies, or use other means to develop and support its conclusions.
- g. Status of all multi-year efforts, including TMDL implementation, that were not completed in the current year and will continue into the subsequent year(s). Additionally, if any of the requested information cannot be obtained, the Permittee shall provide a discussion of the factor(s) limiting its acquisition and steps that will be taken to improve future data collection efforts.

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3. Non-Storm Water Control Measures

- a. Estimate the number of major outfalls within the Permittee's jurisdiction in the subwatershed.
- b. Provide the number of outfalls that were screened for significant non-storm water discharges during the reporting year.
- c. Provide the cumulative number of outfalls that have been screened for significant non-storm water discharges since the date this Order was adopted through the reporting year.
- d. Provide the number of outfalls with confirmed significant non-storm water discharge.
- e. Provide the number of outfalls where significant non-storm water discharge was attributed to other NPDES permitted discharges; other authorized non-storm water discharges; or conditionally exempt discharges pursuant to Part III.A of this Order.
- f. Provide the number of outfalls where significant non-storm water discharges were abated as a result of the Permittee's actions.
- g. Provide the number of outfalls where non-storm water discharges was monitored.
- h. Provide the status of all multi-year efforts, including TMDL implementation, that were not completed in the current year and will continue into the subsequent year(s). Additionally, if any of the requested information cannot be obtained, the Permittee shall provide a discussion of the factor(s) limiting its acquisition and steps that will be taken to improve future data collection efforts.

4. Effectiveness Assessment of Non-Storm Water Control Measures

- a. Provide an assessment as to whether receiving water quality within the jurisdiction of the Permittee is impaired, improving, staying the same or declining during dry-weather conditions. Each Permittee may compare water quality data from the reporting year to previous years with similar dry-weather flows, conduct trends analysis, draw from regional bioassessment studies, or use other means to develop and support its conclusions.
- b. Provide an assessment of the effectiveness of the Permittee(s) control measures in effectively prohibiting non-storm water discharges through the MS4 to the receiving water.
- c. Provide the status of all multi-year efforts that were not completed in the current year and will continue into the subsequent year(s).

5. Integrated Monitoring Compliance Report

- a. Provide an Integrated Monitoring Report that summarizes all identified exceedances of (1) outfall-based storm water monitoring data, (2) wet

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weather receiving water monitoring data, (3) dry weather receiving water data, and (4) non-storm water outfall monitoring data against all applicable receiving water limitations, water quality-based effluent limitations, non-storm water action levels, and aquatic toxicity thresholds as defined in Sections XII.F and G of this MRP. All sample results that exceeded one or more applicable thresholds shall be readily identified.

~~b. If Aquatic Toxicity was confirmed, identify a schedule and provide a plan that describes the anticipated process, laboratories, personnel, and procedures to conduct a Toxicity Identification Evaluation (TIE). Part XII.J.4 of this MRP provides references for the guidance manuals that should be used for performing TIEs.~~

~~c.b. Once completely aquatic toxicity was confirmed and a TIE was conducted, identify the toxic chemicals as determined by the TIE. Include all relevant data to allow the Regional Water Board to review the adequacy and findings of the TIE. This shall include, but not be limited to, the sample(s) date, sample(s) start and end time, sample type(s) (flow-weighted composite, grab, or field measurement), sample location(s) as depicted on the map, the parameters, the analytical results, and the applicable limitation.~~

~~d.c. Provide a description of efforts that were taken to mitigate and/or eliminate all non-storm water discharges that exceeded one or more applicable water quality based effluent limitations, non-storm water action levels, or exhibited caused or contributed to Aquatic Toxicity.~~

~~e.d. Provide a description of efforts that were taken to address storm water discharges that exceeded one or more applicable water quality based effluent limitations, or exhibited caused or contributed to Aquatic Toxicity.~~

~~f.e. Where Receiving Water Limitations were exceeded, provide a description of efforts that were taken to determine whether discharges from the MS4 caused or contributed to the exceedances and all efforts that were taken to control the discharge of pollutants from the MS4 to those receiving waters in response to the exceedances.~~

6. Adaptive Management Strategies

a. Identify the most effective control measures and describe why the measures were effective and how other control measures will be optimized based on past experiences.

b. Identify the least effective control measures and describe why the measures were deemed ineffective and how the control measures will be modified or terminated.

c. Identify significant changes to control measures during the prior year and the rationale for the changes.

d. Describe all significant changes to control measures anticipated to be made in the next year and the rationale for the changes. Those changes

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requiring approval of the Regional Water Board or its Executive Officer shall be clearly identified at the beginning of the Annual Report.

- e. Include a detailed description of control measures to be applied to New Development or Re-development projects disturbing more than 50 acres.
- f. Provide the status of all multi-year efforts that were not completed in the current year and will continue into the subsequent year(s).

7. Supporting Data and Information

- a. All monitoring data and associated meta data used to prepare the Annual Report shall be summarized in an Excel spreadsheet and sorted by watershed, subwatershed and monitoring station/outfall identifier linked to the subwatershed map. The data summary must include the date, sample type (flow-weighted composite, grab, field measurement), sample start and stop times, parameter, analytical method, value, and units. The date field must be linked to a database summarizing the weather data for the sampling date including 24-hour rainfall, rainfall intensity, and days since the previous rain event.
- b. Optional. The Permittee may at its option, provide an additional detailed summary table describing control measures that are not otherwise described in the reporting requirements.

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XIX. TMDL REPORTING

Permittees shall report on the progress of TMDL implementation per the schedules identified below in Sections A – G.

A. Reporting Requirements for Santa Clara River WMA TMDLs

Deliverable	Description	Due Date(s)
Santa Clara River Nitrogen Compounds TMDL		
Work Plan	Permittees shall submit a Work Plan to estimate ammonia and nitrogen loadings from the MS4 for approval by the Regional Water Board Executive Officer. The Work Plan must include monitoring for ammonia, nitrate, and nitrite. The Work Plan may include a phased approach wherein the first phase is based on monitoring from the existing mass emission station in the Santa Clara River. The Work Plan must also contain a protocol and a schedule for implementing additional monitoring if necessary. The Work Plan must also propose triggers for conducting source identification and implementing BMPs, if necessary.	<u>Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP, or</u> For an IMP, 9 months after the effective date of this Order; or <u>If a WMP or IMP or CIMP will not be developed then submitted the Work Plan 12 months after the effective date of this Order.</u> For a CIMP, 12 months after the effective date of this Order
Progress Reports	Annual progress reports on the Implementation Plan must be submitted to the Regional Water Board.	December 15, 2013, and annually thereafter
Upper Santa Clara River Chloride TMDL		
Monitoring Results	Permittees shall conduct chloride, TDS, and sulfate monitoring to ensure that water quality objectives are being met.	December 15, 2013, and annually thereafter
Lake Elizabeth, Munz Lake, and Lake Hughes Trash		
Progress Reports	Report compliance with the installation of full capture systems.	December 15, 2013 2 , and annually thereafter
Santa Clara River Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL		
Receiving Water Monitoring Plan and Outfall Monitoring Plan	Permittees must submit a comprehensive in-stream bacteria water quality monitoring plan for the Santa Clara River Watershed. The monitoring plan should include all applicable bacteria water quality objectives and the sampling frequency must be adequate to assess compliance with the geometric mean objectives. At a minimum, at least one sampling station shall be located in each impaired reach. The outfall monitoring plan shall propose an adequate number of representative outfalls to be sampled, a	March 21, 2013, or <u>Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP.</u> For an IMP, 9 months after the effective date of this Order; or

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	sampling frequency, and protocol for enhanced outfall monitoring as a result of an in-stream exceedance. The Monitoring Plans must be approved by the Regional Water Board Executive Officer before the monitoring data can be considered during the implementation of the TMDL. Once the monitoring plan is approved by the Executive Officer, monitoring shall commence within 30 days.	For a CIMP, 12 months after the effective date of this Order
Draft Implementation Plan	Permittees must submit a draft Implementation Plan outlining how each intends to cooperatively or individually achieve compliance with the water quality-based effluent limitations and the receiving water limitations. The Implementation Plan shall include implementation methods, an implementation schedule and proposed milestones.	March 21, 2015
Final Implementation Plan	Permittees must submit a final Implementation Plan.	Six months after receipt of Regional Water Board comments on the draft Implementation Plan.
Board Briefing	Permittees shall provide a verbal update to the Regional Water Board on the progress of TMDL implementation.	March 21, 2017

B. Reporting Requirements for Santa Monica Bay WMA TMDLs

Deliverable	Description	Due Date(s)
Santa Monica Bay Beaches Bacteria TMDL		
Monitoring Results	Monthly data summary reports shall be submitted to the Regional Water Board by the last day of each month for data collected during the previous month. Two agencies will submit the monthly reports on behalf of all Permittees: City of Los Angeles, Department of Public Works, Bureau of Sanitation, Environmental Monitoring Division (on behalf of Jurisdictional Groups 1 through 6, 8, and 9); and Los Angeles County Sanitation Districts (on behalf of Jurisdictional Group 7).	Monthly on the last day of the month.
Santa Monica Bay Nearshore and Offshore Debris TMDL		
Trash Monitoring and Reporting Plan (TMRP)	Permittees shall develop a Trash Monitoring and Reporting Plan (TMRP) for Regional Water Board Executive Officer approval that describes the methodologies that will be used to assess and monitor trash in their responsible areas within the Santa Monica Bay WMA or along Santa Monica Bay. The TMRP shall include a plan to establish a site specific trash baseline water quality-based effluent limitation if Permittees elect to not use the default baseline effluent limitation. Requirements for the TMRP shall include, but are not limited to, assessment and quantification of trash collected from source areas in the Santa Monica Bay WMA, and shoreline of the Santa Monica Bay. The monitoring plan shall provide details on the frequency, location, and reporting format. Permittees shall propose a metric (e.g., weight, volume, pieces of trash) to measure the amount of trash discharged from their jurisdictional areas.	September 20, 2012; <u>or</u> <u>Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP, or</u> <u>If a WMP or IMP or CIMP will not be developed then submitted the TMRP 12 months after the effective date of this Order.</u> For an IMP, 9 months after the effective date of this Order; or For a CIMP, 12 months after the effective date of this Order
Implement TMRP	Implement TMRP	<u>If TMRP is submitted by September 20, 2012, then implement the TMRP 30 days 6 months from receipt of letter of approval from Regional Water Board Executive Officer, or the date a plan is established by the Executive Officer; or</u> <u>If an IMP or CIMP is submitted, then monitoring shall commence within 30 days after approval of the IMP or CIMP plan by the Executive Officer.</u>
Plastic Pellets Monitoring and Reporting Plan	Permittees identified as responsible jurisdictions and agencies for point sources of trash in the Santa Monica Bay Debris TMDL and in the existing Malibu Creek and Ballona Creek Trash TMDLs, including the Los Angeles County Flood Control District, shall either prepare a Plastic	September 20, 2013, or <u>Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP.</u>

	<p>Pellet Monitoring and Reporting Plan (PMRP) or demonstrate that a PMRP is not required.</p> <p>The PMRP shall include protocols for a timely and appropriate response to possible plastic pellets spills within a Permittees' jurisdictional area, and a comprehensive plan to ensure that plastic pellets are contained.</p>	<p>For an IMP, 9 months after the effective date of this Order; or</p> <p>For a CIMP, 12 months after the effective date of this Order</p>
Implement PMRP	Implement PMRP	March 20, 2016
Submit results of implementing TMRP and PMRP	Submit results of implementing TMRP and PMRP, recommend trash baseline water quality-based effluent limitations, and propose prioritization of Full Capture System installation or implementation of other measures to attain the required trash and plastic pellet reduction.	December 15, 2013, and annually thereafter
Santa Monica Bay TMDL for DDTs and PCBs (USEPA established)		
Monitoring and Reporting Plan	<p>Permittees shall develop a Monitoring and Reporting Plan for Regional Water Board Executive Officer approval that describes the methodologies that will be used to monitor and assess sediment for DDT and PCBs. The monitoring design and assessment framework should be designed to provide credible estimates of the total mass loadings to the Santa Monica Bay. Monitoring should be conducted on a coordinated watershed-wide basis using sufficiently sensitive analytical methods for DDT and PCBs. Monitoring sediments in catch basins designed for pollutant prevention may be a way for Permittees to quantify load reductions to the Santa Monica Bay.</p>	<p><u>Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP, or</u></p> <p><u>If a WMP or IMP or CIMP will not be developed then submitted the Monitoring and Reporting Plan 12 months after the effective date of this Order.</u></p> <p>For an IMP, 9 months after the effective date of this Order; or</p> <p>For a CIMP, 12 months after the effective date of this Order</p>
Malibu Creek and Lagoon Bacteria TMDL		
Monitoring Results	Monthly data summary reports shall be submitted to the Regional Water Board by the last day of each month for data collected during the previous month.	Monthly on the last day of the month.
Malibu Creek Watershed Trash TMDL		
Submit results of TMRP	Submit results of Trash Monitoring and Reporting Plan (TMRP), recommend trash baseline water quality-based effluent limitations, and propose prioritization of Full Capture System installation or implementation of other measures to attain the required trash.	December 15, 2013, and annually thereafter
Malibu Creek Watershed Nutrients TMDL (USEPA established)		
Monitoring and Reporting Plan	<p>Permittees shall develop a Monitoring and Reporting Plan for Regional Water Board Executive Officer approval that demonstrates compliance with the water quality-based effluent limitations for total nitrogen and total phosphorus.</p>	<p><u>Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP, or</u></p> <p><u>If a WMP or IMP or CIMP will not be developed then submitted the Monitoring and Reporting Plan 12 months after the effective date of this Order.</u></p> <p>For an IMP, 9 months after the effective date of</p>

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		this Order; or For a CIMP, 12 months after the effective date of this Order
Ballona Creek Trash TMDL		
Annual Progress Reports	Report compliance with the required percent reduction of trash discharged to Ballona Creek.	December 15, 2013 2 , and annually thereafter.
Ballona Creek Estuary Toxic Pollutants TMDL		
Annual Monitoring Report	Permittees shall submit annual monitoring reports, which include compliance summary tables, to the Regional Water Board.	December 15, 2013 2 , and annually thereafter.
Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL		
Monitoring Results	Monthly data summary reports shall be submitted to the Regional Water Board by the last day of each month for data collected during the previous month.	Monthly on the last day of the month.
Ballona Creek Metals TMDL		
Annual Monitoring Report	Permittees shall submit annual monitoring reports, which include compliance summary tables, to the Regional Water Board.	December 15, 2013 2 , and annually thereafter.
Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation (USEPA established)		
Monitoring and Reporting Plan	Permittees shall develop a Sediment Monitoring and Reporting Plan for Regional Water Board Executive Officer approval to quantify the annual loading of sediment from the Ballona Creek Watershed and the impact of the sediment loading into the Ballona Creek Wetlands.	<u>Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP, or</u> <u>If a WMP or IMP or CIMP will not be developed then submitted the Monitoring and Reporting Plan 12 months after the effective date of this Order.</u> For an IMP, 9 months after the effective date of this Order; or For a CIMP, 12 months after the effective date of this Order
Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL		
Monitoring Results	Monthly data summary reports shall be submitted to the Regional Water Board by the last day of each month for data collected during the previous month.	Monthly on the last day of the month.
Marina del Rey Harbor Toxic Pollutants TMDL		
Annual Monitoring Report	Permittees shall submit annual monitoring reports, which include compliance summary tables, to the Regional Water Board.	December 15, 2013 2 , and annually thereafter.

C. Reporting Requirements for Dominguez Channel and Greater Harbors Waters WMA TMDLs

Deliverable	Description	Due Date(s)
Los Angeles Harbor Bacteria TMDL		
Monitoring Results	Monthly data summary reports shall be submitted to the Regional Water Board by the last day of each month for data collected during the previous month.	Monthly on the last day of the month.
Machado Lake Trash TMDL		
Progress Reports	Report compliance with the required percent reduction of trash discharged to Machado Lake.	December 15, 2013 2 , and annually thereafter.
Machado Lake Nutrient TMDL		
Annual Monitoring Report	The Cities of Palos Verdes Estates, Ranch Palos Verdes, Rolling Hills and Rolling Hills Estates shall submit annual monitoring reports that demonstrate compliance with the concentration-based water quality-based effluent limitations.	December 15, 2013 2 , and annually thereafter.
Annual Monitoring Report	The City of Los Angeles shall submit annual monitoring reports that demonstrate compliance with the Lake Water Quality Management Plan and reduces the external nutrient loading to attain the receiving water limitations for Machado Lake.	December 15, 2013 2 , and annually thereafter.
Annual Monitoring Report	The City of Carson shall submit annual monitoring reports that demonstrate compliance with the concentration-based water quality-based effluent limitations.	December 15, 2013 2 , and annually thereafter.
Annual Monitoring Report	The County of Los Angeles shall submit annual monitoring reports that demonstrate compliance with the mass-based water quality-based effluent limitations.	December 15, 2013 2 , and annually thereafter.
Annual Monitoring Report	The City of Torrance shall submit annual monitoring reports that demonstrate compliance with the mass-based water quality-based effluent limitations.	December 15, 2013, and annually thereafter.
Annual Monitoring Report	The Cities of Lomita and Redondo Beach shall submit annual monitoring reports that demonstrate compliance with the concentration-based water quality-based effluent limitations.	December 15, 2013, and annually thereafter.
Machado Lake Pesticides and PCBs TMDL		
Monitoring and Reporting Plan and Quality Assurance Project Plan	Permittees shall develop a Monitoring and Reporting Plan (MRP) and Quality Assurance Project Plan (QAPP) for Regional Water Board Executive Officer approval. The MRP shall demonstrate compliance and non-compliance with the water quality-based effluent limitations as part of reports submitted to the Regional Water Board. The QAPP shall include protocols for sample collection, standard analytical procedures, and	<u>The deadline for Permittees assigned both WLAs and LAs to submit one document to address both the WLA and LA monitoring requirements and implementation activities shall be September 20, 2013, September 20, 2012, or</u>

	laboratory certification. All samples shall be collected in accordance with <u>applicable SWAMP</u> protocols.	<p><u>Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP, or</u></p> <p><u>If a WMP or IMP or CIMP will not be developed then submitted the work plan 12 months after the effective date of this Order.</u></p> <p><u>For an IMP, 9 months after the effective date of this Order; or</u></p> <p><u>For a CIMP, 12 months after the effective date of this Order</u></p>
Begin Phase 1 Monitoring	Begin Phase 1 Monitoring as outlined in the approved MRP and QAPP.	30 days from date of Executive Officer approval of MRP and QAPP
Phase 1 Monitoring	Conduct Phase 1 Monitoring for 2 years.	2 year monitoring period
Draft Implementation Plan	Based on the results of Phase 1 Monitoring, Permittees shall submit an Implementation Plan to attain water quality-based effluent limitations or document that water quality-based effluent limitations are attained.	6 months from completion of Phase 1 Monitoring
Final Implementation Plan	Permittees shall submit Final Implementation Plan.	1 year from completion of Phase 1 Monitoring
Implementation	Permittees shall begin implementation actions to attain water quality-based effluent limitation, as necessary.	30 days from date of Implementation Plan approval
Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL		
Monitoring and Reporting Plan and Quality Assurance Project Plan	Permittees shall develop Monitoring and Reporting Plans (MRPs) and Quality Assurance Project Plans (QAPPs) for Regional Water Board Executive Officer approval in accordance with the TMDL. The MRPs shall include a requirement that the responsible parties report compliance and non-compliance with water quality-based effluent limitations as part of annual reports submitted to the Regional Water Board. The QAPPs shall include protocols for sample collection, standard analytical procedures, and laboratory certification. All samples shall be collected in accordance with <u>applicable SWAMP</u> protocols.	<p>November 23, 2013, or</p> <p><u>Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP.</u></p> <p><u>For an IMP, 9 months after the effective date of this Order; or</u></p> <p><u>For a CIMP, 12 months after the effective date of this Order</u></p>
Monitoring Plan	Permittees shall implement monitoring as outlined in the approved MRP and QAPP.	30 days after MRP and QAPP is approved by Regional Water Board Executive Officer.
Annual Monitoring Reports	Permittees shall submit annual monitoring reports to the Regional Water Board.	December 15, 2013, and annually thereafter.
Implementation Plan and Contaminated Sediment Management Plan (CSMP)	Permittees in the Dominguez Channel and Greater Harbors Waters Watershed Management Area shall develop and submit an Implementation Plan and Contaminated Sediment Management Plan (CSMP). The CSMP shall include concrete milestones with numeric estimates of load reductions or removal, including milestones for remediating hot spots, including but	<p><u>Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP, or</u></p> <p><u>If a WMP or IMP or CIMP will not be developed then submitted the Implementation Plan and CSMP</u></p>

	not limited to Dominguez Channel Estuary, Consolidated Slip and Fish Harbor, for Regional Water Board Executive Officer approval.	<u>12 months</u> 1 year after the effective date of this Order.
Report of Implementation	Permittees in the Los Angeles River and San Gabriel River Watersheds shall submit a Report of Implementation to the Regional Water Board.	December 15, 2013, and annually thereafter
Implementation Reports	Permittees shall submit annual implementation reports to the Regional Water Board. Report on implementation progress and demonstrate progress toward meeting the water quality-based effluent limitations.	December 15, 2014, and annually thereafter
Updated Implementation Plan and CSMP	Permittees in the Dominguez Channel and Greater Harbors Waters Watershed Management Area shall submit an updated Implementation Plan and Contaminated Sediment Management Plan (CSMP).	March 23, 2017

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D. Reporting Requirements for the Los Angeles River WMA TMDLs

Deliverable	Description	Due Date(s)
Los Angeles River Watershed Trash TMDL		
Reporting	Report compliance with the installation of full capture systems.	December 15, 2013 2 , and annually thereafter.
Los Angeles River Nitrogen Compounds and Related Effects TMDL		
Monitoring Work Plan	Submittal of a Monitoring Work Plan by MS4 p er mittees to estimate nitrogen loadings associated with runoff loads from the storm drain system for approval by the Executive Officer of the Regional Water Board. The Work Plan will include monitoring for ammonia, nitrate, and nitrite. The Work Plan may include a phased approach wherein the first phase is based on monitoring from the existing mass emission station in the Los Angeles River. The Work Plan will also contain protocol and a schedule for implementing additional monitoring if necessary. The Work Plan will also propose triggers for conducting source identification and implementing BMPs, if necessary.	<u>Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP, or</u> <u>If a WMP or IMP or CIMP will not be developed then submitted the Monitoring Work Plan 12 months after the effective date of this Order.</u> For an IMP, 9 months after the effective date of this Order; or For a CIMP, 12 months after the effective date of this Order
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Los Angeles River and Tributaries Metals TMDL		
Annual Monitoring Report	Permittees shall submit annual monitoring reports as detailed in the approved coordinated monitoring plan to the Regional Water Board.	December 15, 2013 2 , and annually thereafter.
Los Angeles River Watershed Bacteria TMDL		
Bacteria Coordinated Monitoring Plan	Permittees shall submit a Bacteria Coordinated Monitoring Plan (CMP), which shall be submitted for Regional Water Board Executive Officer approval. The CMP shall detail: the number and location of sites, including at least one monitoring station per each river segment, reach and tributary addressed under this TMDL; measurements and sample collection methods; and monitoring frequencies. Permittees may also include in the CMP, for Executive Officer consideration, other meteorological stations which may be more representative of the existing hydrology and climate. Each segment, reach, and tributary addressed under this TMDL shall be monitored at least monthly until the subject segment, reach or tributary is at the end of the execution part of its first implementation phase (i.e. 7 years after beginning the segment or tributary-specific phase), to determine compliance with the interim water quality based	March 23, 2013, or <u>Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP.</u> For an IMP, 9 months after the effective date of this Order; or For a CIMP, 12 months after the effective date of this Order

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	<p>effluent limitations. Each segment, reach and tributary addressed under this TMDL shall be monitored at least weekly to determine compliance with the instream targets after the first implementation phase.</p> <p>For parties pursuing a Load Reduction Strategy (LRS), intensive outfall monitoring will be conducted before and after implementation of the LRS. Pre-LRS monitoring will be used to estimate the <i>E. coli</i> loading from MS4 outfalls to the segment or tributary, and identify the outfalls and types of implementation actions that are expected to be necessary to attain the water quality based limits. Post-LRS monitoring will be used to evaluate compliance with the interim water quality based limits and to plan for additional implementation actions to meet the final water quality based limits, in a second implementation phase, if necessary.</p> <p>When applicable, outfall monitoring shall including <i>E. coli</i> by USEPA- approved methods and flow rate at <i>all</i> MS4 outfalls (“snapshots”) that are discharging to a segment or tributary or across jurisdictional boundaries during a given monitoring event. For each LRS, at least six (6) snapshots shall be conducted for pre-LRS monitoring, and at least three (3) snapshots shall be conducted for post- LRS monitoring. For MS4s that choose to follow a non-LRS implementation approach, but choose to demonstrate compliance with Equivalent Conditions, at least six (6) snapshots shall be conducted.</p>	
Implement CMP	Permittees shall begin implementation actions to attain water quality-based effluent limitation, as necessary.	30 days after approval of the CMP
Annual Monitoring Report	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Implementation Plan	Permittees shall submit an Implementation Plan for wet weather with interim milestones for approval of the Regional Water Board Executive Officer.	March 23, 2022
<u>Legg Lake Trash TMDL</u>		
<u>TMRP Reports MFAC</u>	<u>Report compliance with the approved MFAC program.</u>	<u>December 15, 2013, and annually thereafter</u>
<u>Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL</u>		
Compliance Monitoring	<p>To evaluate compliance with numeric targets, monitoring shall take place at existing monitoring sites as well as any new monitoring locations in the ambient water. For beach monitoring locations, daily or systematic weekly sampling in the wave wash at all major drains and creeks, existing monitoring stations at beaches without storm drains, and freshwater outlets is recommended to evaluate compliance. At all beach locations, samples should be taken at ankle depth and on an incoming wave, consistent with section 7961(b) of title 17 of the California Code of Regulations. At locations where there is a freshwater outlet, during wet weather, samples should be taken as close</p>	<p><u>Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP, or</u></p> <p><u>If a WMP or IMP or CIMP will not be developed then submitted the Monitoring Plan 12 months after the effective date of this Order.</u></p>

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	<p>as possible to the wave wash, and no further away than 10 meters down current of the storm drain or outlet.</p> <p>A robust monitoring program shall be developed for the LAR Estuary. Available data includes bi-weekly monitoring from May through September of 2009, and 2010. Monitoring shall be expanded to include year round monitoring requirements, and at least three monitoring locations within the Estuary. We understand that adequate data to establish a reference estuary approach is currently not available. If in the future, adequate data from reference estuary studies become available, it may be appropriate to consider a reference estuary approach to evaluate compliance with these TMDLs.</p>	
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<p>For an IMP, 9 months after the effective date of this Order; or</p> <p>For a CIMP, 12 months after the effective date of this Order</p>		
Annual Monitoring Report	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Los Angeles Area Lakes TMDLs		
Lake Calabastas Nutrient TMDL		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and chlorophyll a. Measurements of the temperature, DO, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement. All parameters must meet target levels at half the Secchi depth. DO and pH must meet target levels from the surface of the water to 0.3 meters above the lake bottom. Additionally, in order to accurately calculate compliance with water quality based limits to the lake expressed in yearly loads, monitoring should include flow estimation or monitoring as well as the water quality concentration measurements.	At a minimum twice during summer months and once during winter.
Supplemental Water Monitoring	At Lake Calabastas, water quality based limits are assigned to supplemental water additions. This source should be monitoring for at minimum; ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and total dissolved solids.	Once a year during the summer months (critical conditions).
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes for at minimum: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and total dissolved	Twice a year.

	solids.	
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013 2 , and annually thereafter.
Echo Park Lake Nutrient TMDL		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids, total dissolved solids and chlorophyll a. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement. All parameters must meet target levels at half the Secchi depth. DO and pH must meet target levels from the surface of the water to 0.3 meters above the lake bottom. Additionally, in order to accurately calculate compliance with water quality based limits to the lake expressed in yearly loads, monitoring should include flow estimation or monitoring as well as the water quality concentration measurements.	At a minimum twice during summer months and once during winter.
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes for at minimum: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and total dissolved solids.	Twice a year.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013 2 , and annually thereafter.
Echo Park Lake PCBs and Organochlorine Pesticide TMDLs		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: total suspended sediments, total PCBs, total chlordane, and dieldrin; as well as the following in-lake sediment parameters: total organic carbon, total PCBs, total chlordane, and dieldrin. Environmentally relevant detection limits should be used (i.e., detection limits lower than applicable target), if available at a commercial laboratory. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement.	December 15, 2013, and annually thereafter.
Fish Tissue Monitoring	Monitoring of fish tissue. For the OC pesticides and PCBs TMDLs, a demonstration that fish tissue targets have been met in any given year must at minimum include a composite sample of skin off fillets from at least five largemouth bass each measuring at least 350mm in length.	At least every three years.
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes. Sampling should be designed to collect sufficient volumes of suspended solids to allow for the analysis of at minimum: total organic carbon, total suspended solids, total PCBs, total chlordane, and dieldrin. Measurements of the	Once a year during a wet weather event.

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	temperature, dissolved oxygen, pH and electrical conductivity should also be taken.	
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Echo Park Lake Trash TMDL		
Compliance Monitoring	Responsible jurisdictions should monitor the trash quantity deposited in the vicinity of Echo Park Lake as well as on the waterbody to comply with the TMDL target and to understand the effectiveness of various implementation efforts. The Rapid Trash Assessment Method is recommended.	Quarterly.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Legg Lake System Nutrient TMDL		
Compliance Monitoring	<u>At a minimum, compliance monitoring should measure the following in-lake water quality parameters: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids, total dissolved solids and chlorophyll <i>a</i>. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement. All parameters must meet target levels at half the Secchi depth. DO and pH must meet target levels from the surface of the water to 0.3 meters above the lake bottom. Additionally, in order to accurately calculate compliance with water quality based limits to the lake expressed in yearly loads, monitoring should include flow estimation or monitoring as well as the water quality concentration measurements.</u>	<u>At a minimum twice during summer months and once during winter.</u>
Stormwater Monitoring	<u>Stormwater sources should be measured near the point where they enter the lakes for at minimum: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and total dissolved solids.</u>	<u>Twice a year.</u>
Reporting	<u>Annual reporting of monitoring results to the Regional Water Board.</u>	<u>December 15, 2013, and annually thereafter.</u>
Peck Road Park Lake Nutrient TMDL		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids, total dissolved solids and chlorophyll <i>a</i> . Measurements of the temperature, DO, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement. All parameters must meet target levels at half the Secchi depth. Deep lakes, such as Peck Road Park Lake, must meet the DO and pH targets in the water column from the surface to 0.3 meters above the bottom of the lake when the lake is not stratified. However,	At a minimum twice during summer months and once during winter.

	when stratification occurs (i.e., a thermocline is present) then the DO and pH targets must be met in the epilimnion, the portion of the water column above the thermocline. Additionally, in order to accurately calculate compliance with water quality based limits to the lake expressed in yearly loads, monitoring should include flow estimation or monitoring as well as the water quality concentration measurements.	
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes for at minimum: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and total dissolved solids.	Twice a year.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013 2 , and annually thereafter.
Peck Road Park Lake PCBs and Organochlorine Pesticide TMDLs		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: total suspended sediments, total PCBs, total chlordane, total DDTs, and dieldrin; as well as the following in-lake sediment parameters: total organic carbon, total PCBs, total chlordane, total DDTs, and dieldrin. Environmentally relevant detection limits should be used (i.e., detection limits lower than applicable target), if available at a commercial laboratory. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement.	December 15, 2013, and annually thereafter.
Fish Tissue Monitoring	Monitoring of fish tissue. For the OC pesticides and PCBs TMDLs, a demonstration that fish tissue targets have been met in any given year must at minimum include a composite sample of skin off fillets from at least five common carp each measuring at least 350mm in length.	At least every three years.
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes. Sampling should be designed to collect sufficient volumes of suspended solids to allow for the analysis of at minimum: total organic carbon, total suspended solids, total PCBs, total chlordane, total DDTs, and dieldrin. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken.	Once a year during a wet weather event.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013 2 , and annually thereafter.
Peck Road Park Lake Trash TMDL		
Compliance Monitoring	Responsible jurisdictions should monitor the trash quantity deposited in the vicinity of Peck Road Park Lake as well as in the waterbody to comply with the TMDL target and to understand the effectiveness of various implementation efforts. The Rapid Trash Assessment Method is recommended.	Quarterly.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013 2 , and annually

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E. Reporting Requirements for San Gabriel River WMA TMDLs

Deliverable	Description	Due Date(s)
San Gabriel River and Impaired Tributaries Metals and Selenium TMDL		
Coordinated Monitoring Plan	<p>Permittees shall develop a Coordinated Monitoring Plan, to be approved by the Regional Water Board Executive Officer, which includes both TMDL effectiveness monitoring and ambient monitoring. The ambient monitoring program shall contain monitoring in all reaches and major tributaries of the San Gabriel River, including but not limited to additional dry- and wet-weather monitoring in the San Gabriel River Reaches 4 and 5 and Walnut Creek, additional dry-weather monitoring in San Gabriel River Reach 2, and additional wet-weather monitoring in San Jose Creek, San Gabriel River Reaches 1 and 3, and the Estuary. Sediment samples shall be collected semi-annually in the Estuary and analyzed for sediment toxicity resulting from copper, lead, selenium, and zinc.</p> <p>The TMDL effectiveness monitoring shall demonstrate the effectiveness of the phased implementation schedule for reducing pollutant loads to achieve the dry- and wet-weather water quality based effluent limitations. Monitoring stations specified for the ambient monitoring program may be used for the TMDL effectiveness monitoring. The final dry-weather monitoring stations shall be located in San Jose Creek Reach 1 and the Estuary. The final wet-weather TMDL effectiveness monitoring stations may be located at the existing Los Angeles County Department of Public Works mass emission sites in San Gabriel River Reach 2 and Coyote Creek.</p> <p>Permittees shall sample once per month, during dry-weather conditions, at each proposed TMDL effectiveness monitoring location. Permittees shall sample at least 4 wet-weather events where flow meets wet-weather conditions (260 cfs in San Gabriel River Reach 2 and 156 cfs in Coyote Creek) in a given storm season (November to March), unless there are fewer than 4 wet-weather events, at each proposed TMDL effectiveness monitoring location. Permittees are encouraged to coordinate with the San Gabriel watershed-wide monitoring program to avoid duplication and leverage resources.</p>	<p><u>Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP, or</u></p> <p><u>If a WMP or IMP or CIMP will not be developed then submitted the Coordinated Monitoring Plan 12 months after the effective date of this Order.</u></p>

For an IMP, 9 months after the effective date of this Order; or
For a CIMP, 12 months after the effective date of this Order

Annual Monitoring Report	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013 2 , and
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		annually thereafter.
Implementation Plan	Permittees shall submit an Implementation Plan outlining how to achieve compliance with the water quality based effluent limitations, for approval of the Regional Water Board Executive Officer. The Plan shall include implementation methods, an implementation schedule, and proposed milestones.	1 year after the effective date of this Order
Legg Lake Trash TMDL		
TMRP Reports	Report compliance with the installation of full capture systems.	December 15, 2012, and annually thereafter
TMRP Reports MFAC	Report compliance with the approved MFAC program.	December 15, 2012, and annually thereafter
Los Angeles Area Lakes TMDLs		
Legg Lake System Nutrient TMDL		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids, total dissolved solids and chlorophyll <i>a</i>. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement. All parameters must meet target levels at half the Secchi depth. DO and pH must meet target levels from the surface of the water to 0.3 meters above the lake bottom. Additionally, in order to accurately calculate compliance with water quality based limits to the lake expressed in yearly loads, monitoring should include flow estimation or monitoring as well as the water quality concentration measurements.	At a minimum twice during summer months and once during winter.
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes for at minimum: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and total dissolved solids.	Twice a year.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013², and annually thereafter.
Puddingstone Reservoir Nutrient TMDL		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and chlorophyll <i>a</i> . Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement. All parameters must meet target levels at half the Secchi depth. DO and pH must meet target levels from the surface of the water to 0.3 meters above the lake bottom when the lake is not stratified. However, when stratification occurs (i.e., a thermocline is present) then the DO and pH targets must be met in the epilimnion, the portion of the water column above the thermocline. Additionally, in order to accurately calculate compliance with water quality based limits	At a minimum twice during summer months and once during winter.

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	to the lake expressed in yearly loads, monitoring should include flow estimation or monitoring as well as the water quality concentration measurements.	
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes for at minimum: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and total dissolved solids.	Twice a year.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013 ² , and annually thereafter.
Puddingstone Reservoir Mercury TMDL		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: total mercury, methylmercury, chloride, sulfate, total organic carbon, alkalinity, total suspended solids, and total dissolved solids; as well as the following in-lake sediment parameters: total mercury, dissolved methylmercury, total organic carbon, total solids and sulfate. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement. Additionally, in order to accurately calculate compliance with allocations expressed in yearly loads, monitoring should include flow estimation or monitoring as well as water quality concentration measurements.	Twice a year.
Fish Tissue Monitoring	Monitoring should include monitoring of largemouth bass (325-375mm in length) fish tissue (skin-off fillets) for mercury concentration.	At least every three years.
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes for at minimum: total mercury, methyl mercury, chloride, sulfate, total organic carbon, alkalinity, total suspended solids, and total dissolved solids.	Twice a year.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013 ² , and annually thereafter.
Puddingstone Reservoir PCBs and Organochlorine Pesticide TMDLs		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: total suspended sediments, total PCBs, total chlordane, dieldrin, and total DDTs; as well as the following in-lake sediment parameters: total organic carbon, total PCBs, total chlordane, dieldrin, and total DDTs. Environmentally relevant detection limits should be used (i.e., detection limits lower than applicable target), if available at a commercial laboratory. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement.	Annually.
Fish Tissue Monitoring	Monitoring of fish tissue. For the OC pesticides and PCBs TMDLs a demonstration that fish tissue targets have been met in any given year must at minimum include a composite sample of skin off fillets from at least five common carp each measuring at least 350mm in length.	At least every three years.
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes. Sampling should be designed to collect sufficient volumes of suspended solids to allow	Once a year during a wet weather event.

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	for the analysis of at minimum: total organic carbon, total suspended solids, total PCBs, total chlordane, dieldrin, and total DDTs. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken.	
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 201 3 ² , and annually thereafter.

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F. Reporting Requirements for Los Cerritos Channel WMA TMDLs

Deliverable	Description	Due Date(s)
Los Cerritos Channel Metals TMDL		
Coordinated Monitoring Plan	<p>Permittees shall develop a Coordinated Monitoring Plan, to be approved by the Regional Water Board Executive Officer, which includes both TMDL effectiveness monitoring and ambient monitoring. The ambient monitoring program shall be developed to track trends in water quality improvements in Los Cerritos Channel; to provide background information on hardness values; and the partitioning of metals between the total recoverable and dissolved fraction.</p> <p>TMDL effectiveness monitoring shall demonstrate the effectiveness of the phased implementation schedule for reducing pollutant loads to achieve the water quality based effluent limitations. Monitoring stations specified for the ambient monitoring program may be used for the TMDL effectiveness monitoring. Permittees shall sample at least 4 wet-weather events where flow meets wet-weather conditions (>23 cfs in Los Cerritos Channel above the tidal prism) in a given storm season.</p>	<p><u>Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP, or</u></p> <p><u>If a WMP or IMP or CIMP will not be developed then submitted the Coordinated Monitoring Plan 12 months after the effective date of this Order.</u></p> <p>For an IMP, 9 months after the effective date of this Order; or</p> <p>For a CIMP, 12 months after the effective date of this Order</p>
Annual Monitoring Report	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Implementation Plan	Permittees shall submit an Implementation Plan outlining how to achieve compliance with the water quality based effluent limitations, for approval of the Regional Water Board Executive Officer. The Plan shall include implementation methods, an implementation schedule, and proposed milestones.	1 year after the effective date of this Order
Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL		
Monitoring	Water column and sediment samples will be collected at the outlet of the storm drains discharging to the lagoon, while water column, sediment, and fish tissue samples will be collected in the West Arm, Central Arm, North Arm, at the outlet of the lagoon to Marine Stadium during an incoming tide, and at the outfall of Termino Avenue Drain to Marine Stadium as specified in the Colorado Lagoon TMDL Monitoring Plan (CLTMP).	6 months after Regional Water Board Executive Officer approves the CLTMP. February 1, 2013
Annual Monitoring Reports	Permittees shall submit annual monitoring reports to the Regional Water Board. All compliance monitoring must be conducted in conjunction with a Regional Water Board approved Quality Assurance Project Plan.	December 15, 2013, and annually thereafter.
Implementation Progress	Permittees shall submit annual progress reports on the status of implementation actions performed under the TMDL. The plan shall contain mechanisms for demonstration progress toward meeting the water quality based effluent limitations.	December 15, 2013, and annually thereafter.

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G. Reporting Requirements for Middle Santa Ana River WMA TMDL

Deliverable	Description	Due Date(s)
Middle Santa Ana River Watershed Bacteria Indicator TMDL		
Bacterial Indicator Water Quality Monitoring Plan	Permittees shall develop and submit for approval by the Executive Officer of the Regional Water Board a Bacterial Indicator Water Quality Monitoring Plan in accordance with the TMDL.	<p><u>Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP, or</u></p> <p><u>If a WMP or IMP or CIMP will not be developed then submitted the Monitoring Plan 12 months after the effective date of this Order.</u></p> <p>For an IMP, 9 months after the effective date of this Order; or</p> <p>For a CIMP, 12 months after the effective date of this Order</p>
Bacterial Indicator Urban Source Evaluation Plan	Permittees shall develop and submit for approval by the Regional Water Board a Bacterial Indicator Urban Source Evaluation Plan. This plan shall include steps needed to identify specific activities, operations, and processes in urban areas that contribute bacterial indicators to San Antonio Channel. The plan shall also include a proposed schedule for completion of each of the steps identified.	1 year after the effective date of this Order
Progress Reports	Annual progress reports on implementation shall be submitted to the Regional Water Board.	December 15, 2013, and annually thereafter.

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I, Samuel Unger, Executive Officer, do hereby certify that this Monitoring and Reporting Program is a full, true, and correct copy of the MRP adopted by the California Regional Water Quality Control Board, Los Angeles Region, on <Adoption Date>.

Samuel Unger, P.E.
Executive Officer

Date: _____ 2012

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ATTACHMENT G. NON-STORM WATER ACTION LEVELS AND MUNICIPAL ACTION LEVELS

I. SANTA CLARA RIVER WATERSHED AREA

Table G-1. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or less than 1 ppt)

Parameter	Units	Average Monthly	Daily Maximum
<i>E. Coli-coli</i> Bacteria	#/100 ml	126 ¹	235 ²
Chloride	mg/L	³	--
Sulfate	mg/L	³	--
Total Dissolved Solids	mg/L	³	--
Methylene Blue Active Substances	mg/L	0.5 ⁴	--
Aluminum, Total Recoverable	mg/L	1.0 ⁴	--
Cyanide, Total Recoverable	µg/L	4.3	8.5
Copper, Total Recoverable	µg/L	⁵	⁵
Mercury, Total Recoverable	µg/L	0.051	1.0 1
Selenium, Total Recoverable	µg/L	4.1	8.2

¹ *E. Coli-coli* density shall not exceed a geometric mean of 126/100 ml.
² *E. Coli-coli* density in a single sample shall not exceed 235/100 ml.
³ In accordance with applicable water quality objectives contained in ~~Tables 3-8 and 3-10~~ Chapter 3 of the Basin Plan.
⁴ Applicable only to discharges to receiving waters designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.
⁵ Action levels are hardness dependent. See Section VII of this Attachment for a listing of the applicable action levels.

Table G-2. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity between 1 ppt and 10 ppt)

Parameter	Units	Average Monthly	Daily Maximum
<i>E. Coli-coli</i> Bacteria	#/100 ml	126 ¹	235 ²
Total Coliform Bacteria	#/100 ml	1,000 ³	10,000 ⁴
Fecal Coliform Bacteria	#/100 ml	200 ³	400 ⁴
Enterococcus Bacteria	#/100 ml	35 ³	104 ⁴
Chloride	mg/L	⁵	--
Sulfate	mg/L	⁵	--
Total Dissolved Solids	mg/L	⁵	--
Methylene Blue Active Substances	mg/L	0.5 ⁶	--
Aluminum, Total Recoverable	mg/L	1.0 ⁶	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	⁷	⁷
Mercury, Total Recoverable	µg/L	0.051	1.0 1
Selenium, Total Recoverable	µg/L	4.1	8.2

¹ *E. Coli-coli* density shall not exceed a geometric mean of 126/100 ml.
² *E. Coli-coli* density in a single sample shall not exceed 235/100 ml.
³ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.

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- ⁴ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁵ In accordance with applicable water quality objectives contained in ~~Tables 3-8 and 3-10~~ Chapter 3 of the Basin Plan.
- ⁶ Applicable only to discharges to receiving waters designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.
- ⁷ The applicable action level is the most stringent between corresponding Table ~~HG-1~~ and Table ~~HG-3~~ action levels.

Table G-3. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or greater than 10 ppt 95% or more of the time)

Parameter	Units	Average Monthly	Daily Maximum
Total Coliform Bacteria	#/100 ml	1,000 ^{1,2}	10,000 ^{2,3}
Fecal Coliform Bacteria	#/100 ml	200 ¹	400 ³
Enterococcus Bacteria	#/100 ml	35 ¹	104 ³
Chloride	mg/L	4	--
Sulfate	mg/L	4	--
Total Dissolved Solids	mg/L	4	--
Methylene Blue Active Substances	mg/L	0.5 ⁵	--
Aluminum, Total Recoverable	mg/L	1.0 ⁵	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	2.9	5.8
Mercury, Total Recoverable	µg/L	0.051	4.00 1
Selenium, Total Recoverable	µg/L	58	117

- ¹ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ² In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ³ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁴ In accordance with applicable water quality objectives contained in ~~Tables 3-8 and 3-10~~ Chapter 3 of the Basin Plan.
- ⁵ Applicable only to discharges to receiving waters designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.

Table G-4. Action Levels for Discharges to Ocean Waters (Surf Zone)

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Total Coliform Bacteria	#/100 ml	70 ¹	230 ¹	--
Fecal Coliform Bacteria	#/100 ml	--	200 ²	400 ³
Enterococcus Bacteria	#/100 ml	--	35 ²	104 ³
Cyanide, Total Recoverable	µg/L	1	4	10
Copper, Total Recoverable	µg/L	3	12	30
Mercury, Total Recoverable	µg/L	0.04	0.16	0.4
Selenium, Total Recoverable	µg/L	15	60	150

- ¹ In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.

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- ² Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ³ Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

II. LOS ANGELES RIVER WATERSHED MANAGEMENT AREA

Table G-5. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or less than 1 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
<i>E. Coli-coli</i> Bacteria	#/100 ml	126 ²	235 ³
Chloride	mg/L	⁴	--
Nitrite Nitrogen, Total (as N)	mg/L	1.0 ⁵	--
Sulfate	mg/L	⁴	--
Total Dissolved Solids	mg/L	⁴	--
Turbidity	NTU	5 ⁵	--
Aluminum, Total Recoverable	mg/L	1.0 ⁵	--
Cyanide, Total Recoverable	µg/L	4.3	8.5
Copper, Total Recoverable	µg/L	⁶	⁶
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² *E. Coli-coli* density shall not exceed a geometric mean of 126/100 ml.
- ³ *E. Coli-coli* density in a single sample shall not exceed 235/100 ml.
- ⁴ In accordance with applicable water quality objectives contained in Tables 3-8 and 3-10 Chapter 3 of the Basin Plan.
- ⁵ Applicable only to discharges to receiving waters or receiving waters with underlying groundwater designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.
- ⁶ Action levels are hardness dependent. See Section VII of this Attachment for a listing of the applicable action levels.

Table G-6. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity between 1 ppt and 10 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
<i>E. Coli-coli</i> Bacteria	#/100 ml	126 ²	235 ³
Total Coliform Bacteria	#/100 ml	1,000 ⁴	10,000 ⁵
Fecal Coliform Bacteria	#/100 ml	200 ⁴	400 ⁵
Enterococcus Bacteria	#/100 ml	35 ⁴	104 ⁵
Chloride	mg/L	⁶	--
Nitrite Nitrogen, Total (as N)	mg/L	1.0 ⁷	--
Sulfate	mg/L	⁶	--
Total Dissolved Solids	mg/L	⁶	--
Turbidity	NTU	5 ⁷	--
Aluminum, Total Recoverable	mg/L	1.0 ⁷	--
Cyanide, Total Recoverable	µg/L	0.50	1.0

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Parameter	Units	Average Monthly	Daily Maximum
Copper, Total Recoverable	µg/L	8	8
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

¹ Within the range of 6.5 to 8.5 at all times.

² *E. Coli* density shall not exceed a geometric mean of 126/100 ml.

³ *E. Coli* density in a single sample shall not exceed 235/100 ml.

⁴ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.

⁵ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

⁶ In accordance with applicable water quality objectives contained in ~~Tables 3-8 and 3-10~~ Chapter 3 of the Basin Plan.

⁷ Applicable only to discharges to receiving waters or receiving waters with underlying groundwater designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.

⁸ The applicable action level is the most stringent between corresponding Table HG-5 and Table HG-7 action levels.

Table G-7. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or greater than 10 ppt 95% or more of the time)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
Total Coliform Bacteria	#/100 ml	1,000 ^{2, 3}	10,000 ^{3, 4}
Fecal Coliform Bacteria	#/100 ml	200 ²	400 ⁴
Enterococcus Bacteria	#/100 ml	35 ²	104 ⁴
Chloride	mg/L	5	--
Nitrite Nitrogen, Total (as N)	mg/L	1.0 ⁶	--
Sulfate	mg/L	5	--
Total Dissolved Solids	mg/L	5	--
Turbidity	NTU	5 ⁶	--
Aluminum, Total Recoverable	mg/L	1.0 ⁶	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	2.9	5.8
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	58	117

¹ Within the range of 6.5 to 8.5 at all times.

² Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.

³ In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.

⁴ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

⁵ In accordance with applicable water quality objectives contained in ~~Tables 3-8 and 3-10~~ Chapter 3 of the Basin Plan.

⁶ Applicable only to discharges to receiving waters or receiving waters with underlying groundwater designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.

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Table G-8. Action Levels for Discharges to Ocean Waters (Surf Zone)

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
pH	Standard units	6.0-9.0 ¹		
Total Coliform Bacteria	#/100 ml	70 ²	230 ²	--
Fecal Coliform Bacteria	#/100 ml	--	200 ³	400 ⁴
Enterococcus Bacteria	#/100 ml	--	35 ³	104 ⁴
Turbidity	NTU	75	100	225
Cyanide, Total Recoverable	µg/L	1	4	10
Copper, Total Recoverable	µg/L	3	12	30
Mercury, Total Recoverable	µg/L	0.04	0.16	0.4
Selenium, Total Recoverable	µg/L	15	60	150

¹ Within the range of 6.0 to 9.0 at all times.

² In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.

³ Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.

⁴ Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

III. DOMINGUEZ CHANNEL WATERSHED MANAGEMENT AREA

Table G-9. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or less than 1 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
<i>E. Coli-coli</i> Bacteria	#/100 ml	126 ²	235 ³
Cyanide, Total Recoverable	µg/L	4.3	8.5
Copper, Total Recoverable	µg/L	4	4
Lead, Total Recoverable	µg/L	4	4
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

¹ Within the range of 6.5 to 8.5 at all times.

² *E. Coli-coli* density shall not exceed a geometric mean of 126/100 ml.

³ *E. Coli-coli* density in a single sample shall not exceed 235/100 ml.

⁴ Action levels are hardness dependent. See Section VII of this Attachment for a listing of the applicable action levels.

Table G-10. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity between 1 ppt and 10 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	s.u	6.5-8.5 ¹	
<i>E. Coli-coli</i> Bacteria	#/100 ml	126 ²	235 ³

R E V I S E D T E N T A T I V E

Parameter	Units	Average Monthly	Daily Maximum
Total Coliform Bacteria	#/100 ml	1,000 ⁴	10,000 ⁵
Fecal Coliform Bacteria	#/100 ml	200 ⁴	400 ⁵
Enterococcus Bacteria	#/100 ml	35 ⁴	104 ⁵
Cyanide, Total Recoverable	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	⁶	⁶
Lead, Total Recoverable	µg/L	⁶	⁶
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² *E. Coli* density shall not exceed a geometric mean of 126/100 ml.
- ³ *E. Coli* density in a single sample shall not exceed 235/100 ml.
- ⁴ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ⁵ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁶ The applicable action level is the most stringent between corresponding Table H-G-9 and Table H-G-11 action levels.

Table G-11. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or greater than 10 ppt 95% or more of the time)

Parameter	Units	Average Monthly	Daily Maximum
pH	s.u	6.5-8.5 ¹	
Total Coliform Bacteria	#/100 ml	1,000 ^{2,3}	10,000 ^{3,4}
Fecal Coliform Bacteria	#/100 ml	200 ²	400 ⁴
Enterococcus Bacteria	#/100 ml	35 ²	104 ⁴
Cyanide, Total Recoverable	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	2.9	5.8
Lead, Total Recoverable	µg/L	7.0	14
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	58	117

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ³ In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ⁴ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

Table G-12. Action Levels for Discharges to Ocean Waters (Surf Zone)

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
pH	s.u	6.0-9.0 ¹		
Total Coliform Bacteria	#/100 ml	70 ²	230 ²	--
Fecal Coliform Bacteria	#/100 ml	--	200 ³	400 ⁴
Enterococcus Bacteria	#/100 ml	--	35 ³	104 ⁴
Cyanide, Total Recoverable	µg/L	1	4	10
Copper, Total	µg/L	3	12	30

R E V I S E D T E N T A T I V E

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Recoverable				
Lead, Total Recoverable	µg/L	2	8	20
Mercury, Total Recoverable	µg/L	0.04	0.16	0.4
Selenium, Total Recoverable	µg/L	15	60	150

- ¹ Within the range of 6.0 to 9.0 at all times.
- ² In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ³ Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ⁴ Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

IV. BALLONA CREEK WATERSHED MANAGEMENT AREA

Table G-13. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or less than 1 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
<i>E. Coli-coli</i> Bacteria	#/100 ml	126 ²	235 ³
Cyanide, Total Recoverable	µg/L	4.3	8.5
Copper, Total Recoverable	µg/L	4	4
Lead, Total Recoverable	µg/L	4	4
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² *E. Coli-coli* density shall not exceed a geometric mean of 126/100 ml.
- ³ *E. Coli-coli* density in a single sample shall not exceed 235/100 ml.
- ⁴ Action levels are hardness dependent. See Section VII of this Attachment for a listing of the applicable action levels.

Table G-14. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity between 1 ppt and 10 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
<i>E. Coli-coli</i> Bacteria	#/100 ml	126 ²	235 ³
Total Coliform Bacteria	#/100 ml	1,000 ⁴	10,000 ⁵
Fecal Coliform Bacteria	#/100 ml	200 ⁴	400 ⁵
Enterococcus Bacteria	#/100 ml	35 ⁴	104 ⁵
Cyanide	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	6	6
Lead, Total Recoverable	µg/L	6	6
Mercury, Total Recoverable	µg/L	0.051	1.00.1
Selenium, Total Recoverable	µg/L	4.1	8.2

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- ¹ Within the range of 6.5 to 8.5 at all times.
- ² *E. Coli* density shall not exceed a geometric mean of 126/100 ml.
- ³ *E. Coli* density in a single sample shall not exceed 235/100 ml.
- ⁴ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ⁵ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁶ The applicable action level is the most stringent between corresponding Table HG-13 and Table HG-15 action levels.

Table G-15. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or greater than 10 ppt 95% or more of the time)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
Total Coliform Bacteria	#/100 ml	1,000 ^{2, 3}	10,000 ^{3, 4}
Fecal Coliform Bacteria	#/100 ml	200 ²	400 ⁴
Enterococcus Bacteria	#/100 ml	35 ²	104 ⁴
Cyanide, Total Recoverable	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	2.9	5.8
Lead, Total Recoverable	µg/L	7.0	14
Mercury, Total Recoverable	µg/L	0.051	4.00.1
Selenium, Total Recoverable	µg/L	58	117

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ³ In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ⁴ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

Table G-16. Action Levels for Discharges to Ocean Waters (Surf Zone)

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
pH	Standard units	6.0-9.0 ¹		
Total Coliform Bacteria	#/100 ml	70 ²	230 ²	--
Fecal Coliform Bacteria	#/100 ml	--	200 ³	400 ⁴
Enterococcus Bacteria	#/100 ml	--	35 ³	104 ⁴
Cyanide, Total Recoverable	µg/L	1	4	10
Copper, Total Recoverable	µg/L	3	12	30
Lead, Total Recoverable	µg/L	2	8	20
Mercury, Total Recoverable	µg/L	0.04	0.16	0.4
Selenium, Total Recoverable	µg/L	15	60	150

- ¹ Within the range of 6.0 to 9.0 at all times.

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- ² In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ³ Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ⁴ Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

V. MALIBU CREEK WATERSHED MANAGEMENT AREA NON-STORM WATER ACTION LEVELS

Table G-17. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or less than 1 ppt)

Parameter	Units	Average Monthly	Daily Maximum
<i>E. Coli-coli</i> Bacteria	#/100 ml	126 ¹	235 ²
Sulfate	mg/L	³	--
Total Dissolved Solids	mg/L	³	--
Cyanide, Total Recoverable	µg/L	4.3	8.5
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

¹ *E. Coli-coli* density shall not exceed a geometric mean of 126/100 ml.
² *E. Coli-coli* density in a single sample shall not exceed 235/100 ml.
³ In accordance with applicable water quality objectives contained in ~~Tables 3-8 and 3-10~~ Chapter 3 of the Basin Plan.

Table G-18. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity between 1 ppt and 10 ppt)

Parameter	Units	Average Monthly	Daily Maximum
<i>E. Coli-coli</i> Bacteria	#/100 ml	126 ¹	235 ²
Total Coliform Bacteria	#/100 ml	1,000 ³	10,000 ⁴
Fecal Coliform Bacteria	#/100 ml	200 ³	400 ⁴
Enterococcus Bacteria	#/100 ml	35 ³	104 ⁴
Sulfate	mg/L	⁵	--
Total Dissolved Solids	mg/L	⁵	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

¹ *E. Coli-coli* density shall not exceed a geometric mean of 126/100 ml.
² *E. Coli-coli* density in a single sample shall not exceed 235/100 ml.
³ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
⁴ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
⁵ In accordance with applicable water quality objectives contained in ~~Tables 3-8 and 3-10~~ Chapter 3 of the Basin Plan.

Table G-19. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or greater than 10 ppt 95% or more of the time)

Parameter	Units	Average Monthly	Daily Maximum
Total Coliform Bacteria	#/100 ml	1,000 ^{1,2}	10,000 ^{2,3}

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Parameter	Units	Average Monthly	Daily Maximum
Fecal Coliform Bacteria	#/100 ml	200 ¹	400 ³
Enterococcus Bacteria	#/100 ml	35 ¹	104 ³
Sulfate	mg/L	4	--
Total Dissolved Solids	mg/L	4	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	58	117

- ¹ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ² In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ³ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁴ In accordance with applicable water quality objectives contained in Tables 3-8 and 3-10 Chapter 3 of the Basin Plan.

Table G-20. Action Levels for Discharges to Ocean Waters (Surf Zone)

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Total Coliform Bacteria	#/100 ml	70 ¹	230 ¹	--
Fecal Coliform Bacteria	#/100 ml	--	200 ²	400 ³
Enterococcus Bacteria	#/100 ml	--	35 ²	104 ³
Cyanide, Total Recoverable	µg/L	1	4	10
Mercury, Total Recoverable	µg/L	0.04	0.16	0.4
Selenium, Total Recoverable	µg/L	15	60	150

- ¹ In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ² Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ³ Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

VI. SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA

Table G-21. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or less than 1 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.0-9.0 ¹	
<i>E. Coli-coli</i> Bacteria	#/100 ml	126 ²	235 ³
Chloride	mg/L	4	--
Nitrate Nitrogen, Total (as N)	mg/L	4	--
Sulfate	mg/L	4	--
Total Dissolved Solids	mg/L	4	--

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Parameter	Units	Average Monthly	Daily Maximum
Aluminum, Total Recoverable	mg/L	1.0 ⁵	--
Cyanide, Total Recoverable	µg/L	4.3	8.5
Cadmium, Total Recoverable	µg/L	6	6
Copper, Total Recoverable	µg/L	6	6
Lead, Total Recoverable	µg/L	6	6
Mercury, Total Recoverable	µg/L	0.051	0.10
Nickel, Total Recoverable	µg/L	6	6
Selenium, Total Recoverable	µg/L	4.1	8.2
Silver, Total Recoverable	µg/L	6	6
Zinc, Total Recoverable	µg/L	6	6

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² *E. Coli* density shall not exceed a geometric mean of 126/100 ml.
- ³ *E. Coli* density in a single sample shall not exceed 235/100 ml.
- ⁴ In accordance with applicable water quality objectives contained in Tables 3-8 and 3-10 Chapter 3 of the Basin Plan.
- ⁵ Applicable only to discharges to receiving waters or receiving waters with underlying groundwater designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.
- ⁶ Action levels are hardness dependent. See Section VII of this Attachment for a listing of the applicable action levels.

Table G-22. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity between 1 ppt and 10 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.0-9.0 ¹	
<i>E. Coli</i> Bacteria	#/100 ml	126 ²	235 ³
Total Coliform Bacteria	#/100 ml	1,000 ⁴	10,000 ⁵
Fecal Coliform Bacteria	#/100 ml	200 ⁴	400 ⁵
Enterococcus Bacteria	#/100 ml	35 ⁴	104 ⁵
Chloride	mg/L	6	--
Nitrate Nitrogen, Total (as N)	mg/L	6	--
Sulfate	mg/L	6	--
Total Dissolved Solids	mg/L	6	--
Aluminum, Total Recoverable	mg/L	1.0 ⁷	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Cadmium, Total Recoverable	µg/L	8	8
Copper, Total Recoverable	µg/L	8	8
Lead, Total Recoverable	µg/L	8	8
Mercury, Total Recoverable	µg/L	0.051	0.10
Nickel, Total Recoverable	µg/L	8	8
Selenium, Total Recoverable	µg/L	4.1	8.2
Silver, Total Recoverable	µg/L	8	8
Zinc, Total Recoverable	µg/L	8	8

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² *E. Coli* density shall not exceed a geometric mean of 126/100 ml.
- ³ *E. Coli* density in a single sample shall not exceed 235/100 ml.
- ⁴ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.

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- ⁵ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁶ In accordance with applicable water quality objectives contained in ~~Tables 3-8 and 3-10~~ Chapter 3 of the Basin Plan.
- ⁷ Applicable only to discharges to receiving waters designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.
- ⁸ The applicable action level is the most stringent between corresponding Table ~~HG-21~~ and Table ~~HG-23~~ action levels.

Table G-23. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or greater than 10 ppt 95% or more of the time)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.0-9.0 ¹	
Total Coliform Bacteria	#/100 ml	1,000 ^{2,3}	10,000 ^{2,4}
Fecal Coliform Bacteria	#/100 ml	200 ²	400 ⁴
Enterococcus Bacteria	#/100 ml	35 ²	104 ⁴
Chloride	mg/L	5	--
Nitrate Nitrogen, Total (as N)	mg/L	5	--
Sulfate	mg/L	5	--
Total Dissolved Solids	mg/L	5	--
Aluminum, Total Recoverable	mg/L	1.0 ⁶	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Cadmium, Total Recoverable	µg/L	7.7	15
Copper, Total Recoverable	µg/L	2.9	5.8
Lead, Total Recoverable	µg/L	7.0	14
Mercury, Total Recoverable	µg/L	0.051	0.10
Nickel, Total Recoverable	µg/L	6.8	14
Silver, Total Recoverable	µg/L	1.1	2.2
Selenium, Total Recoverable	µg/L	58	117
Zinc, Total Recoverable	µg/L	47	95

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ³ In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ⁴ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁵ In accordance with applicable water quality objectives contained in ~~Tables 3-8 and 3-10~~ Chapter 3 of the Basin Plan.
- ⁶ Applicable only to discharges to receiving waters designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.

Table G-24. Action Levels for Discharges to Ocean Waters (Surf Zone)

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
pH	Standard units	6.0-9.0 ¹		
Total Coliform Bacteria	#/100 ml	70 ²	230 ²	--
Fecal Coliform Bacteria	#/100 ml	--	200 ³	400 ⁴
Enterococcus	#/100 ml	--	35 ³	104 ⁴

R E V I S E D T E N T A T I V E

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Cyanide, Total Recoverable	µg/L	1	4	10
Cadmium, Total Recoverable	µg/L	1	4	10
Copper, Total Recoverable	µg/L	3	12	30
Lead, Total Recoverable	µg/L	2	8	20
Mercury, Total Recoverable	µg/L	0.04	0.16	0.4
Nickel, Total Recoverable	µg/L	5	20	50
Silver, Total Recoverable	µg/L	0.7	2.8	7.0
Selenium, Total Recoverable	µg/L	15	60	150
Zinc, Total Recoverable	µg/L	20	80	200

- ¹ Within the range of 6.0 to 9.0 at all times.
- ² In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ³ Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ⁴ Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

VII. HARDNESS-BASED ACTION LEVELS FOR METALS

Cadmium, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
5.0	0.1	0.2	125.0	2.4	4.8	245.0	4.1	8.2
10.0	0.2	0.3	130.0	2.5	5.0	250.0	4.1	8.3
15.0	0.3	0.5	135.0	2.5	5.1	255.0	4.2	8.4
20.0	0.4	0.7	140.0	2.6	5.3	260.0	4.3	8.5
25.0	0.5	0.9	145.0	2.7	5.4	265.0	4.3	8.7
30.0	0.6	1.2	150.0	2.8	5.5	270.0	4.4	8.8
35.0	0.7	1.4	155.0	2.8	5.7	275.0	4.5	8.9
40.0	0.8	1.6	160.0	2.9	5.8	280.0	4.5	9.1
45.0	0.9	1.8	165.0	3.0	6.0	285.0	4.6	9.2
50.0	1.0	2.1	170.0	3.1	6.1	290.0	4.6	9.3
55.0	1.1	2.3	175.0	3.1	6.3	295.0	4.7	9.4
60.0	1.3	2.5	180.0	3.2	6.4	300.0	4.8	9.6
65.0	1.4	2.8	185.0	3.3	6.5	310.0	4.9	9.8
70.0	1.5	3.0	190.0	3.3	6.7	320.0	5.0	10.1
75.0	1.6	3.2	195.0	3.4	6.8	330.0	5.1	10.3
80.0	1.7	3.4	200.0	3.5	7.0	340.0	5.3	10.5
85.0	1.8	3.6	205.0	3.5	7.1	350.0	5.4	10.8

R E V I S E D T E N T A T I V E

Cadmium, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
90.0	1.9	3.7	210.0	3.6	7.2	360.0	5.5	11.0
95.0	1.9	3.9	215.0	3.7	7.4	370.0	5.6	11.3
100.0	2.0	4.0	220.0	3.7	7.5	380.0	5.7	11.5
105.0	2.1	4.2	225.0	3.8	7.6	390.0	5.9	11.7
110.0	2.2	4.3	230.0	3.9	7.8	400.0	6.0	12.0
115.0	2.2	4.5	235.0	3.9	7.9	>400	6.0	12.0
120.0	2.3	4.7	240.0	4.0	8.0			

Copper, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
5.0	0.4	0.8	125.0	8.6	17.2	245.0	16.2	32.5
10.0	0.8	1.6	130.0	8.9	17.9	250.0	16.5	33.1
15.0	1.2	2.3	135.0	9.2	18.5	255.0	16.8	33.8
20.0	1.5	3.1	140.0	9.6	19.2	260.0	17.1	34.4
25.0	1.9	3.8	145.0	9.9	19.8	265.0	17.4	35.0
30.0	2.2	4.5	150.0	10.2	20.5	270.0	17.8	35.6
35.0	2.6	5.2	155.0	10.5	21.1	275.0	18.1	36.2
40.0	2.9	5.9	160.0	10.8	21.8	280.0	18.4	36.9
45.0	3.3	6.6	165.0	11.2	22.4	285.0	18.6	37.4
50.0	3.6	7.3	170.0	11.5	23.0	290.0	18.9	38.0
55.0	4.0	8.0	175.0	11.8	23.7	295.0	19.2	38.5
60.0	4.3	8.6	180.0	12.1	24.3	300.0	19.5	39.1
65.0	4.6	9.3	185.0	12.4	25.0	310.0	20.0	40.2
70.0	5.0	10.0	190.0	12.8	25.6	320.0	20.6	41.3
75.0	5.3	10.7	195.0	13.1	26.2	330.0	21.1	42.4
80.0	5.6	11.3	200.0	13.4	26.9	340.0	21.7	43.5
85.0	6.0	12.0	205.0	13.7	27.5	350.0	22.2	44.6
90.0	6.3	12.7	210.0	14.0	28.1	360.0	22.8	45.7
95.0	6.6	13.3	215.0	14.3	28.7	370.0	23.3	46.8
100.0	7.0	14.0	220.0	14.6	29.4	380.0	23.8	47.8
105.0	7.3	14.6	225.0	15.0	30.0	390.0	24.4	48.9
110.0	7.6	15.3	230.0	15.3	30.6	400.0	24.9	50.0
115.0	7.9	15.9	235.0	15.6	31.3	>400	24.9	50.0
120.0	8.3	16.6	240.0	15.9	31.9			

Lead, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
5.0	0.1	0.1	125.0	3.5	6.9	245.0	8.1	16.3
10.0	0.1	0.3	130.0	3.6	7.3	250.0	8.3	16.7

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Lead, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
15.0	0.2	0.5	135.0	3.8	7.6	255.0	8.6	17.2
20.0	0.3	0.7	140.0	4.0	8.0	260.0	8.8	17.6
25.0	0.4	0.9	145.0	4.2	8.4	265.0	9.0	18.0
30.0	0.6	1.1	150.0	4.4	8.7	270.0	9.2	18.5
35.0	0.7	1.4	155.0	4.5	9.1	275.0	9.4	18.9
40.0	0.8	1.6	160.0	4.7	9.5	280.0	9.6	19.3
45.0	0.9	1.9	165.0	4.9	9.9	285.0	9.9	19.8
50.0	1.1	2.2	170.0	5.1	10.2	290.0	10.1	20.2
55.0	1.2	2.4	175.0	5.3	10.6	295.0	10.3	20.7
60.0	1.4	2.7	180.0	5.5	11.0	300.0	10.5	21.1
65.0	1.5	3.0	185.0	5.7	11.4	310.0	11.0	22.0
70.0	1.7	3.3	190.0	5.9	11.8	320.0	11.4	22.9
75.0	1.8	3.6	195.0	6.1	12.2	330.0	11.9	23.8
80.0	2.0	3.9	200.0	6.3	12.6	340.0	12.3	24.8
85.0	2.1	4.2	205.0	6.5	13.0	350.0	12.8	25.7
90.0	2.3	4.6	210.0	6.7	13.4	360.0	13.3	26.6
95.0	2.4	4.9	215.0	6.9	13.8	370.0	13.7	27.6
100.0	2.6	5.2	220.0	7.1	14.2	380.0	14.2	28.5
105.0	2.8	5.5	225.0	7.3	14.6	390.0	14.7	29.5
110.0	2.9	5.9	230.0	7.5	15.1	400.0	15.2	30.5
115.0	3.1	6.2	235.0	7.7	15.5	>400	15.2	30.5
120.0	3.3	6.6	240.0	7.9	15.9			

Nickel, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
5.0	3.4	6.8	125.0	51.5	103.3	245.0	90.9	182.5
10.0	6.1	12.2	130.0	53.2	106.7	250.0	92.5	185.6
15.0	8.6	17.2	135.0	54.9	110.2	255.0	94.1	188.7
20.0	10.9	21.9	140.0	56.6	113.6	260.0	95.6	191.9
25.0	13.2	26.5	145.0	58.3	117.1	265.0	97.2	195.0
30.0	15.4	30.9	150.0	60.0	120.5	270.0	98.7	198.1
35.0	17.5	35.2	155.0	61.7	123.9	275.0	100.3	201.2
40.0	19.6	39.4	160.0	63.4	127.2	280.0	101.8	204.3
45.0	21.7	43.5	165.0	65.1	130.6	285.0	103.3	207.4
50.0	23.7	47.6	170.0	66.8	133.9	290.0	104.9	210.4
55.0	25.7	51.6	175.0	68.4	137.3	295.0	106.4	213.5
60.0	27.7	55.5	180.0	70.1	140.6	300.0	107.9	216.6
65.0	29.6	59.4	185.0	71.7	143.9	310.0	111.0	222.7
70.0	31.5	63.2	190.0	73.3	147.1	320.0	114.0	228.7
75.0	33.4	67.0	195.0	75.0	150.4	330.0	117.0	234.7
80.0	35.3	70.8	200.0	76.6	153.7	340.0	120.0	240.7

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Nickel, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
85.0	37.1	74.5	205.0	78.2	156.9	350.0	123.0	246.7
90.0	39.0	78.2	210.0	79.8	160.2	360.0	125.9	252.7
95.0	40.8	81.9	215.0	81.4	163.4	370.0	128.9	258.6
100.0	42.6	85.5	220.0	83.0	166.6	380.0	131.8	264.5
105.0	44.4	89.1	225.0	84.6	169.8	390.0	134.8	270.4
110.0	46.2	92.7	230.0	86.2	173.0	400.0	137.7	276.2
115.0	48.0	96.2	235.0	87.8	176.1	>400	137.7	276.2
120.0	49.7	99.8	240.0	89.4	179.3			

Zinc, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
5.0	4.7	9.4	125.0	72.0	144.5	245.0	127.4	255.6
10.0	8.5	17.0	130.0	74.5	149.4	250.0	129.6	260.0
15.0	11.9	24.0	135.0	76.9	154.2	255.0	131.8	264.4
20.0	15.2	30.6	140.0	79.3	159.1	260.0	134.0	268.8
25.0	18.4	37.0	145.0	81.7	163.9	265.0	136.1	273.1
30.0	21.5	43.1	150.0	84.1	168.6	270.0	138.3	277.5
35.0	24.5	49.1	155.0	86.4	173.4	275.0	140.5	281.9
40.0	27.4	55.0	160.0	88.8	178.1	280.0	142.6	286.2
45.0	30.3	60.8	165.0	91.1	182.8	285.0	144.8	290.5
50.0	33.1	66.5	170.0	93.5	187.5	290.0	146.9	294.8
55.0	35.9	72.1	175.0	95.8	192.2	295.0	149.1	299.1
60.0	38.7	77.6	180.0	98.1	196.8	300.0	151.2	303.4
65.0	41.4	83.0	185.0	100.4	201.4	310.0	155.5	312.0
70.0	44.1	88.4	190.0	102.7	206.0	320.0	159.7	320.5
75.0	46.7	93.7	195.0	105.0	210.6	330.0	163.9	328.9
80.0	49.3	99.0	200.0	107.3	215.2	340.0	168.1	337.4
85.0	51.9	104.2	205.0	109.5	219.8	350.0	172.3	345.8
90.0	54.5	109.4	210.0	111.8	224.3	360.0	176.5	354.1
95.0	57.1	114.5	215.0	114.0	228.8	370.0	180.6	362.4
100.0	59.6	119.6	220.0	116.3	233.3	380.0	184.8	370.7
105.0	62.1	124.7	225.0	118.5	237.8	390.0	188.9	379.0
110.0	64.6	129.7	230.0	120.7	242.3	400.0	193.0	387.2
115.0	67.1	134.7	235.0	123.0	246.7	>400	193.0	387.2
120.0	69.6	139.6	240.0	125.2	251.2			

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VIII. MUNICIPAL ACTION LEVELS

Conventional Pollutants

Pollutants	pH	TSS mg/L	COD mg/L	Kjedahl Nitrogen (TKN) mg/L	Nitrate & Nitrite-total mg/L	P- total mg/L
Municipal Action Level	7.70 6.0-9.0	264.1	247.5	4.59	1.85	0.80

Metals

Pollutants	Cd- total µg/L	Cr-total µg/L	Cu- total µg/L	Pb- total µg/L	Ni- total µg/L	Zn- total µg/L	Hg- total µg/L
Municipal Action Level	2.52	20.20	71.12	102.00	27.43	641.3	0.32

This Order establishes Municipal Action Levels (MALs) to identify subwatersheds requiring additional Best Management Practices (BMPs) to reduce pollutant loads and prioritize implementation of additional BMPs. MALs for selected pollutants are based on nationwide Phase I MS4 monitoring data for pollutants in storm water (<http://unix.eng.ua.edu/~rpitt/Research/Research.shtml>, last visited on May 9, 2012). The MALs were obtained by computing the upper 25th percentile for selected pollutants for Rain Zone 6 using the statistical program Minitab. Non-detects were removed from the data set and all data from the database were used.

Under this Order, the Municipal Action Levels (MALs) shall be utilized by Permittees to identify subwatersheds discharging pollutants at levels in excess of the MALs. Within those subwatersheds where pollutant levels in the discharge are in excess of the MALs, Permittees shall implement controls and measures necessary to reduce the discharge of pollutants.

In order to determine if MS4 discharges are in excess of the MALs, Permittees shall conduct outfall monitoring as required in the Monitoring and Reporting Program (MRP) (Attachment E). A MAL Assessment Report shall be submitted to the Regional Water Board Executive Officer as part of the Annual Report. The MAL Assessment Report shall present the monitoring data in comparison to the applicable MALs, and identify those subwatersheds with a running average of twenty percent or greater of exceedances of the MALs listed in this attachment in discharges of storm water from the MS4.

Beginning in Year 3 after the effective date of this Order, each Permittee shall submit a MAL Action Plan with the Annual Report (first MAL Action Plan due with December 15, 2013 Annual Report) to the Regional Water Board Executive Officer, for those subwatersheds with a

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running average of twenty percent or greater of exceedances of the MALs in any discharge of storm water from the MS4. The plan shall include an assessment of the sources responsible for the MAL exceedances, the existing storm water programs and BMPs that address those sources, an assessment of potential program enhancements, alternative BMPs and actions the Permittee shall implement to reduce discharges to a level that is equivalent to or below the MALs, and an implementation schedule for such actions for Executive Officer approval. The MAL Action Plan shall provide the technical rationale to demonstrate the proposed measures and controls will attain the MALs. If the MAL Action Plan is not approved within 90 days of the due date, the Executive Officer may establish an appropriate plan with at least 90 day notification and consultation to the Permittees.

Within 90 days of the plan approval by the Regional Water Board Executive Officer, the Permittee shall initiate the BMPs and actions proposed in the MAL Action Plan, together with any other practicable BMPs or actions that the Executive Officer determines to be necessary to meet the MALs. The Permittee shall complete the proposed actions in accordance with the approved implementation schedule.

Upon completion of the actions specified in the approved MAL Action Plan, the Permittee shall re-monitor the subject subwatershed in accordance with the MRP, and submit a Post-Project MAL Assessment Report to the Regional Water Board Executive Officer.

Implementation of an approved Watershed Management Program per Part VI.C of the Order fulfills all requirements related to the development and implementation of the MAL Action Plan.

As additional data become available through the MRP or from the Regional Subset of the National Dataset, MALs may be revised annually by the Regional Water Board Executive Officer in accordance with an equivalent statistical method as that used to establish the MALs in this attachment with at least 90 day notification and consultation to the Permittees.

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ATTACHMENT K. PERMITTEES AND TMDLS MATRIX

Note: For all tables in this Attachment, Permittees listed in *italics* are Multi-Jurisdictional Permittees.

Table K-1: Santa Clara River Watershed Management Area TMDLs

SANTA CLARA RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS			
	Santa Clara River Nitrogen Compounds TMDL	Upper Santa Clara River Chloride TMDL	Lake Elizabeth, Munz Lake, and Lake Hughes Trash TMDL	Santa Clara River Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL
<i>Los Angeles (County of)</i>	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X
<i>Santa Clarita</i>	X	X		X

Table K-2: Santa Monica Bay Watershed Management Area TMDLs

SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS					
				Malibu Creek Subwatershed		
	Santa Monica Bay Beaches Bacteria TMDL (Wet and Dry Weather)	Santa Monica Bay Nearshore and Offshore Debris TMDL	Santa Monica Bay TMDL for DDTs and PCBs	Malibu Creek and Lagoon Bacteria TMDL	Malibu Creek Watershed Trash TMDL	Malibu Creek Nutrient TMDL
<i>Agoura Hills</i>	X	X	X	X	X	X
<i>Beverly Hills</i>	X	X	X			
<i>Calabasas</i>	X	X	X	X	X	X
<i>Culver City</i>	X	X	X			
<i>El Segundo</i>	X	X	X			
<i>Hermosa Beach</i>	X	X	X			
<i>Hidden Hills</i>	X	X	X	X	X	X
<i>Inglewood</i>	X	X	X			

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SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS					
				Malibu Creek Subwatershed		
	Santa Monica Bay Beaches Bacteria TMDL (Wet and Dry Weather)	Santa Monica Bay Nearshore and Offshore Debris TMDL	Santa Monica Bay TMDL for DDTs and PCBs	Malibu Creek and Lagoon Bacteria TMDL	Malibu Creek Watershed Trash TMDL	Malibu Creek Nutrient TMDL
<i>Los Angeles (City of)</i>	X	X	X			
<i>Los Angeles (County of)</i>	X	X	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X	X	X
Malibu	X	X	X	X	X	X
<i>Manhattan Beach</i>	X	X	X			
<i>Palos Verdes Estates</i>	X	X	X			
<i>Rancho Palos Verdes</i>	X	X	X			
<i>Redondo Beach</i>	X	X	X			
<i>Rolling Hills</i>	X	X	X			
<i>Rolling Hills Estates</i>	X	X	X			
Santa Monica	X	X	X			
<i>Torrance</i>	X	X	X			
<i>West Hollywood</i>	X	X	X			
<i>Westlake Village</i>	X	X	X	X	X	X

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Table K-3: Santa Monica Bay Watershed Management Area TMDLs

SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS						
	Ballona Creek Subwatershed					Marina del Rey Subwatershed	
	Ballona Creek Trash TMDL	Ballona Creek Estuary Toxic Pollutants TMDL	Ballona Creek, Ballona estuary and Sepulveda Channel Bacteria TMDL	Ballona Creek Metals TMDL	Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation	Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL	Marina del Rey Harbor Toxic Pollutants TMDL
Agoura Hills							
Beverly Hills	X	X	X	X	X		
Calabasas							
Culver City	X	X	X	X	X	X	X
<i>El Segundo</i>							
Hermosa Beach							
<i>Hidden Hills</i>							
<i>Inglewood</i>	X	X	X	X	X		
<i>Los Angeles (City of)</i>	X	X	X	X	X	X	X
<i>Los Angeles (County of)</i>	X	X	X	X	X	X	X
<i>Los Angeles County Flood Control</i>		X	X	X	X	X	X
Malibu							
<i>Manhattan Beach</i>							
<i>Palos Verdes Estates</i>							
<i>Rancho Palos Verdes</i>							
<i>Redondo Beach</i>							
<i>Rolling Hills</i>							
<i>Rolling Hills Estates</i>							

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SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS						
	Ballona Creek Subwatershed					Marina del Rey Subwatershed	
	Ballona Creek Trash TMDL	Ballona Creek Estuary Toxic Pollutants TMDL	Ballona Creek, Ballona estuary and Sepulveda Channel Bacteria TMDL	Ballona Creek Metals TMDL	Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation	Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL	Marina del Rey Harbor Toxic Pollutants TMDL
Santa Monica	X	X	X	X	X		
<i>Torrance</i>							
West Hollywood	X	X	X	X	X		
Westlake Village							

Table K-4: Dominguez Channel Watershed Management Area TMDLs

DOMINGUEZ CHANNEL WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS				
	Los Angeles Harbor Bacteria TMDL	Machado Lake Trash TMDL	Machado Lake Nutrient TMDL	Machado Lake Pesticides and PCBs TMDL	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Carson</i>		X	X	X	X
<i>Compton</i>					X
El Segundo					X
Gardena					X
Hawthorne					X
<i>Inglewood</i>					X
Lawndale					X
Lomita		X	X	X	
<i>Los Angeles (City of)</i>	X	X	X	X	X
<i>Los Angeles (County of)</i>	X	X	X	X	X
<i>Los Angeles County Flood Control</i>		X	X	X	X

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DOMINGUEZ CHANNEL WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS				
	Los Angeles Harbor Bacteria TMDL	Machado Lake Trash TMDL	Machado Lake Nutrient TMDL	Machado Lake Pesticides and PCBs TMDL	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Manhattan Beach</i>					X
<i>Palos Verdes Estates</i>		X	X	X	
<i>Rancho Palos Verdes</i>		X	X	X	X-
<i>Redondo Beach</i>		X	X	X	X
<i>Rolling Hills</i>		X	X	X	X-
<i>Rolling Hills Estates</i>		X	X	X	X-
<i>Torrance</i>		X	X	X	X

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Table K-5: Los Angeles River Watershed Management Area TMDLs

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS							
	Los Angeles River Watershed Trash TMDL	Los Angeles River Nitrogen Compounds and Related Effects TMDL	Los Angeles River and Tributaries Metals TMDL	Los Angeles River Watershed Bacteria TMDL	<u>Legg Lake Trash TMDL</u>	Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL	Los Angeles Area Lake TMDLs for Lake Calabasas, Echo Park Lake, <u>Legg Lake</u> and Peck Road Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Alhambra</i>	X	X	X	X				
<i>Arcadia</i>	X	X	X	X			X	
<i>Bell</i>	X	X	X	X				
<i>Bell Gardens</i>	X	X	X	X				
<i>Bradbury</i>	X	X	X	X			X	
<i>Burbank</i>	X	X	X	X				
<i>Calabasas</i>	X	X	X	X			X	
<i>Carson</i>	X	X	X	X				
<i>Commerce</i>	X	X	X	X				

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LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS							
	Los Angeles River Watershed Trash TMDL	Los Angeles River Nitrogen Compounds and Related Effects TMDL	Los Angeles River and Tributaries Metals TMDL	Los Angeles River Watershed Bacteria TMDL	Legg Lake Trash TMDL	Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL	Los Angeles Area Lake TMDLs for Lake Calabasas, Echo Park Lake, Legg Lake and Peck Road Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Compton</i>	X	X	X	X				X
<i>Cudahy</i>	X	X	X	X				
<i>Downey</i>	X	X	X	X				
<i>Duarte</i>	X	X	X	X			X	
<i>El Monte</i>	X	X	X	X	X		X	
<i>Glendale</i>	X	X	X	X				
<i>Hidden Hills</i>	X	X	X	X				
<i>Huntington Park</i>	X	X	X	X				
<i>Inglewood</i>								
<i>Irwindale</i>	X	X	X	X			X	
<i>La Canada Flintridge</i>	X	X	X	X				
<i>Lakewood</i>	X	X						X
<i>Los Angeles (City of)</i>	X	X	X	X			X	X
<i>Los Angeles (County of)</i>	X	X	X	X	X		X	X
<i>Los Angeles County Flood Control</i>		X	X	X	X	X	X	X
<i>Lynwood</i>	X	X	X	X				
<i>Maywood</i>	X	X	X	X				
<i>Monrovia</i>	X	X	X	X			X	
<i>Montebello</i>	X	X	X	X				
<i>Monterey Park</i>	X	X	X	X				
<i>Paramount</i>	X	X	X	X				X

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LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS							
	Los Angeles River Watershed Trash TMDL	Los Angeles River Nitrogen Compounds and Related Effects TMDL	Los Angeles River and Tributaries Metals TMDL	Los Angeles River Watershed Bacteria TMDL	Legg Lake Trash TMDL	Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL	Los Angeles Area Lake TMDLs for Lake Calabastas, Echo Park Lake, Legg Lake and Peck Road Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
Pasadena	X	X	X	X				
Pico Rivera	X	X	X	X				
Rosemead	X	X	X	X				
San Fernando	X	X	X	X				
San Gabriel	X	X	X	X				
San Marino	X	X	X	X				
Santa Clarita	X	X	X	X				
Sierra Madre	X	X	X	X			X	
Signal Hill	X	X	X	X		X		X
South El Monte	X	X	X	X	X		X	
South Gate	X	X	X	X				
South Pasadena	X	X	X	X				
Temple City	X	X	X	X				
Vernon	X	X	X	X				

REVISIONS ATTACHED

Table K-6: San Gabriel River Watershed Management Area TMDLs

SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS			
	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL	Legg Lake Trash TMDL	Los Angeles Area Lakes TMDLs for Legg Lake, Puddingstone Reservoir, and Santa Fe Dam Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL

SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS			
	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL	Legg Lake Trash TMDL	Los Angeles Area Lakes TMDLs for Legg Lake, Puddingstone Reservoir, and Santa Fe Dam Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Arcadia</i>	X			
<i>Artesia</i>	X			
<i>Azusa</i>	X		X	
<i>Baldwin Park</i>	X			
<i>Bellflower</i>	X			X
<i>Bradbury</i>	X			
<i>Cerritos</i>	X			
<i>Claremont</i>	X		X	
<i>Covina</i>	X			
<i>Diamond Bar</i>	X			
<i>Downey</i>	X			
<i>Duarte</i>	X			
<i>El Monte</i>	X	X	X	
<i>Glendora</i>	X			
<i>Hawaiian Gardens</i>	X			
<i>Industry</i>	X			
<i>Irwindale</i>	X		X	
<i>La Habra Heights</i>	X			
<i>La Mirada</i>	X			
<i>La Puente</i>	X			
<i>La Verne</i>	X		X	
<i>Lakewood</i>	X			
<i>Los Angeles (County of)</i>	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X
<i>Monrovia</i>	X-			

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SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS			
	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL	Legg Lake Trash TMDL	Los Angeles Area Lakes TMDLs for Legg Lake , Puddingstone Reservoir, and Santa Fe Dam Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
Norwalk	X			
<i>Pico Rivera</i>	X			
Pomona	X		X	
San Dimas	X		X	
Santa Fe Springs	X			
South El Monte	X	X	X	
Walnut	X			
West Covina	X			
Whittier	X			

Table K-7: Los Cerritos Channel and Alamitos Bay Watershed Management Area TMDLs

LOS CERRITOS CHANNEL AND ALAMITOS BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS		
	Los Cerritos Channel Metals TMDL	Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Bellflower</i>	X		X
<i>Cerritos</i>	X		
<i>Downey</i>	X		
<i>Lakewood</i>	X		
<i>Los Angeles (County of)</i>	X		X
<i>Los Angeles County Flood Control</i>	X	X	X
<i>Paramount</i>	X		
<i>Signal Hill</i>	X		

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Table K-8: Middle Santa Ana River Watershed Management Area TMDLs

MIDDLE SANTA ANA RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDL
	Middle Santa Ana River Watershed Bacterial Indicator TMDL
Claremont	X
Pomona	X

Table K-9: Los Angeles River Watershed Management Area Metals TMDLs by Reach

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River and Tributaries Metals TMDL				
	Reach 1 and Compton Creek	Reach 2, Rio Hondo, Arroyo Seco, and all contributing subwatersheds	Reach 3, Verdugo Wash, and Burbank Western Channel	Reach 4, Reach 5, Tujunga Wash, and all contributing subwatersheds	Reach 6, Bell Creek, and all contributing subwatersheds
Alhambra		X			
Arcadia		X			
Bell		X			
Bell Gardens		X			
Bradbury		X			
Burbank			X	X	
Calabasas					X
Carson	X				
Commerce		X			
Compton	X	X			
Cudahy		X			
Downey		X			
Duarte		X			
El Monte		X			
Glendale		X	X	X	
Hidden Hills					X

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LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River and Tributaries Metals TMDL				
	Reach 1 and Compton Creek	Reach 2, Rio Hondo, Arroyo Seco, and all contributing subwatersheds	Reach 3, Verdugo Wash, and Burbank Western Channel	Reach 4, Reach 5, Tujunga Wash, and all contributing subwatersheds	Reach 6, Bell Creek, and all contributing subwatersheds
<i>Huntington Park</i>	X	X			
<i>Inglewood</i>					
<i>Irwindale</i>		X			
<i>La Canada Flintridge</i>		X	X		
<i>Lakewood</i>					
<i>Los Angeles (City of)</i>	X	X	X	X	X
<i>Los Angeles (County of)</i>	X	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X	X
<i>Lynwood</i>	X	X			
<i>Maywood</i>		X			
<i>Monrovia</i>		X			
<i>Montebello</i>		X			
<i>Monterey Park</i>		X			
<i>Paramount</i>		X			
<i>Pasadena</i>		X	X		
<i>Pico Rivera</i>		X			
<i>Rosemead</i>		X			
<i>San Fernando</i>				X	
<i>San Gabriel</i>		X			
<i>San Marino</i>		X			
<i>Santa Clarita</i>					
<i>Sierra Madre</i>		X			
<i>Signal Hill</i>	X				
<i>South El Monte</i>		X			
<i>South Gate</i>	X	X			
<i>South Pasadena</i>		X			

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LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River and Tributaries Metals TMDL				
	Reach 1 and Compton Creek	Reach 2, Rio Hondo, Arroyo Seco, and all contributing subwatersheds	Reach 3, Verdugo Wash, and Burbank Western Channel	Reach 4, Reach 5, Tujunga Wash, and all contributing subwatersheds	Reach 6, Bell Creek, and all contributing subwatersheds
Temple City		X			
Vernon		X			

Table K-10: Los Angeles River Watershed Management Area Bacteria TMDL by Reach

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River Watershed Bacteria TMDL																
	Los Angeles River Segment					Los Angeles River Tributary											
	A	B	C	D	E	Aliso Canyon Wash	Arroyo Seco	Bell Creek	Bull Creek	Burbank Western Channel	Compton Creek	Dry Canyon Creek	McCoy Canyon Creek	Rio Hondo	Tujunga Wash	Verdugo Wash	
Alhambra		X												X			
Arcadia														X			
Bell		X															
Bell Gardens		X												X			
Bradbury														X			
Burbank			X						X								
Calabasas											X	X					
Carson										X							
Commerce		X												X			
Compton	X	X								X							
Cudahy		X															
Downey		X												X			
Duarte														X			
El Monte														X			
Glendale		X	X				X		X						X	X	

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LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River Watershed Bacteria TMDL															
	Los Angeles River Segment					Los Angeles River Tributary										
	A	B	C	D	E	Aliso Canyon Wash	Arroyo Seco	Bell Creek	Bull Creek	Burbank Western Channel	Compton Creek	Dry Canyon Creek	McCoy Canyon Creek	Rio Hondo	Tujunga Wash	Verdugo Wash
<i>Hidden Hills</i>								X					X			
<i>Huntington Park</i>		X									X					
<i>Inglewood</i>																
<i>Irwindale</i>														X		
<i>La Canada Flintridge</i>			X				X									X
<i>Lakewood</i>	X															
<i>Los Angeles (City of)</i>		X	X	X	X	X	X	X	X	X	X	X	X		X	X
<i>Los Angeles (County of)</i>	X	X	X		X	X	X	X	X		X	X	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Lynwood</i>	X	X									X					
<i>Maywood</i>		X														
<i>Monrovia</i>														X		
<i>Montebello</i>		X												X		
<i>Monterey Park</i>		X												X		
<i>Paramount</i>	X	X														
<i>Pasadena</i>		X	X				X							X		X
<i>Pico Rivera</i>														X		
<i>Rosemead</i>														X		
<i>San Fernando</i>															X	
<i>San Gabriel</i>														X		
<i>San Marino</i>														X		
<i>Santa Clarita</i>									X							

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LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River Watershed Bacteria TMDL																
	Los Angeles River Segment					Los Angeles River Tributary											
	A	B	C	D	E	Aliso Canyon Wash	Arroyo Seco	Bell Creek	Bull Creek	Burbank Western Channel	Compton Creek	Dry Canyon Creek	McCoy Canyon Creek	Rio Hondo	Tujunga Wash	Verdugo Wash	
Sierra Madre														X			
Signal Hill	X																
South El Monte														X			
South Gate		X								X				X			
South Pasadena		X					X							X			
Temple City														X			
Vernon		X															

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Table K-11: Santa Monica Bay Watershed Management Area Bacteria TMDL by Reach

SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	Santa Monica Bay Beaches Bacteria TMDL (Wet and Dry Weather)								
	Jurisdiction Group 1	Jurisdiction Group 2	Jurisdiction Group 3	Jurisdiction Group 4	Jurisdiction Group 5	Jurisdiction Group 6	Jurisdiction Group 7	Jurisdiction Group 8	Jurisdiction Group 9
Agoura Hills									X
Beverly Hills								X	
Calabasas	X								X
Culver City								X	
El Segundo		X			X				
Hermosa Beach					X	X			
Hidden Hills									X
Inglewood								X	
Los Angeles (City of)	X	X	X				X	X	

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SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	Santa Monica Bay Beaches Bacteria TMDL (Wet and Dry Weather)								
	Jurisdiction Group 1	Jurisdiction Group 2	Jurisdiction Group 3	Jurisdiction Group 4	Jurisdiction Group 5	Jurisdiction Group 6	Jurisdiction Group 7	Jurisdiction Group 8	Jurisdiction Group 9
<i>Los Angeles (County of)</i>	X	X		X	X	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X	X	X	X	X	X
Malibu	X			X					X
<i>Manhattan Beach</i>					X	X			
<i>Palos Verdes Estates</i>							X		
<i>Rancho Palos Verdes</i>							X		
<i>Redondo Beach</i>						X			
<i>Rolling Hills</i>							X		
<i>Rolling Hills Estates</i>							X		
Santa Monica		X	X					X	
<i>Torrance</i>						X			
West Hollywood								X	
Westlake Village									X

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Table K-12: San Gabriel River Watershed Management Area Metals TMDLs by Reach

SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL							
	Walnut Creek	San Jose Creek	Coyote Creek	San Gabriel River Reach 1	San Gabriel River Reach 2	San Gabriel River Reach 3	San Gabriel River Reach 4	San Gabriel River Reach 5
<i>Arcadia</i>							X	
<i>Artesia</i>			X	X				
<i>Azusa</i>	X							X
<i>Baldwin Park</i>	X					X	X	
<i>Bellflower</i>				X				
<i>Bradbury</i>								
<i>Cerritos</i>			X	X				
<i>Claremont</i>	X	X						
<i>Covina</i>	X							
<i>Diamond Bar</i>		X	X					
<i>Downey</i>				X	X			
<i>Duarte</i>								X
<i>El Monte</i>						X	X	
<i>Glendora</i>	X							X
<i>Hawaiian Gardens</i>			X					
<i>Industry</i>	X	X			X	X		
<i>Irwindale</i>	X					X	X	X
<i>La Habra Heights</i>		X	X					
<i>La Mirada</i>			X					
<i>La Puente</i>	X	X				X		
<i>La Verne</i>	X	X						
<i>Lakewood</i>			X	X				
<i>Los Angeles (County of)</i>	X	X	X		X	X		X
<i>Los Angeles County Flood Control</i>	X	X	X	X	X	X	X	X

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SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL							
	Walnut Creek	San Jose Creek	Coyote Creek	San Gabriel River Reach 1	San Gabriel River Reach 2	San Gabriel River Reach 3	San Gabriel River Reach 4	San Gabriel River Reach 5
Monrovia								X-
Norwalk			X	X				
Pico Rivera					X	X		
Pomona	X	X						
San Dimas	X	X						
Santa Fe Springs			X	X	X			
South El Monte						X		
Walnut	X	X						
West Covina	X	X						
Whittier		X	X		X	X		

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Table K-13: Dominguez Channel Watershed Management Area Toxics TMDL by Reach

DOMINGUEZ CHANNEL WATERSHED MANAGEMENT AREA PERMITTEES	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL					
	Dominguez Channel	Dominguez Channel Estuary	Greater Los Angeles and Long Beach Harbors	Los Angeles River Estuary	Consolidated Slip	Los Angeles River and San Gabriel River
Bellflower			X			
Carson	X	X				
Compton	X	X				
El Segundo	X					
Gardena	X	X				
Hawthorne	X					
Inglewood	X					
Lakewood			X			
Lawndale	X					

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DOMINGUEZ CHANNEL WATERSHED MANAGEMENT AREA PERMITTEES	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL					
	<u>Dominguez Channel</u>	<u>Dominguez Channel Estuary</u>	<u>Greater Los Angeles and Long Beach Harbors</u>	<u>Los Angeles River Estuary</u>	<u>Consolidated Slip</u>	<u>Los Angeles River and San Gabriel River</u>
<u>Los Angeles (City of)</u>	X	X	X	X	X	
<u>Los Angeles (County of)</u>	X	X	X	X	X	
<u>Los Angeles County Flood Control District</u>	X	X	X	X	X	
<u>Manhattan Beach</u>	X					
<u>Paramount</u>			X			
<u>Rancho Palos Verdes</u>			X			
<u>Redondo Beach</u>	X					
<u>Rolling Hills</u>			X			
<u>Rolling Hills Estates</u>			X			
<u>Signal Hill</u>			X	X		
<u>Torrance</u>	X	X				
<u>Los Angeles River and San Gabriel River Metals TMDLs Responsible Parties¹</u>						see footnote 1 below

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¹ Permittees subject to the Los Angeles River Metals TMDL and the San Gabriel River Metals TMDL are required to submit a monitoring plan and a report of implementation.

ATTACHMENT M. TMDLs IN THE SANTA MONICA BAY WATERSHED MANAGEMENT AREA

A. Santa Monica Bay Beaches Bacteria TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-2.
2. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Santa Monica Bay beaches during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

3. Receiving Water Limitations
 - a. Permittees in each defined jurisdictional group shall comply with the interim single sample bacteria receiving water limitations for shoreline monitoring stations within their jurisdictional area during wet weather, per the schedule below:

Deadline	Cumulative percentage reduction from the total exceedance day reductions required for each jurisdictional group as identified in Table 1
July 15, 2013	25%
July 15, 2018	50%

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Table M-1: Interim Single Sample Bacteria Receiving Water Limitations by Jurisdictional Group

Jurisdiction Group	Primary Jurisdiction	Additional Responsible Jurisdictions & Agencies	Subwatershed(s)	Monitoring Site(s)	Interim Single Sample Bacteria Receiving Water Limitations as Maximum Allowable Exceedance Days during Wet Weather		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
1	County of Los Angeles	Malibu City of Los Angeles (Topanga only) Calabasas (Topanga only)	Arroyo Sequit	SMB 1-1	221	212	197
			Carbon Canyon	SMB 1-13			
			Corral Canyon	SMB 1-11, SMB 1-12			
			Encinal Canyon	SMB 1-3			
			Escondido Canyon	SMB 1-8			
			Las Flores Canyon	SMB 1-14			
			Latigo Canyon	SMB 1-9			
			Los Alisos Canyon	SMB 1-2			
			Pena Canyon	SMB 1-16			
			Piedra Gorda Canyon	SMB 1-15			
			Ramirez Canyon	SMB 1-6, SMB 1-7			
			Solstice Canyon	SMB 1-10			
			Topanga Canyon	SMB 1-18			
			Trancas Canyon	SMB 1-4			
			Tuna Canyon	SMB 1-17			
Zuma Canyon	SMB 1-5						
2	City of Los Angeles	County of Los Angeles El Segundo (DW only) Manhattan Beach (DW only) Culver City (MDR only) Santa Monica	Castlerock	SMB 2-1	342	324	294
			Dockweiler	SMB 2-10, SMB 2-11, SMB 2-12, SMB 2-13, SMB 2-14, SMB 2-15			
			Marina del Rey	SMB 2-8, SMB 2-9			
			Pulga Canyon	SMB 2-4, SMB 2-5			

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Jurisdiction Group	Primary Jurisdiction	Additional Responsible Jurisdictions & Agencies	Subwatershed(s)	Monitoring Site(s)	Interim Single Sample Bacteria Receiving Water Limitations as Maximum Allowable Exceedance Days during Wet Weather		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
			Santa Monica Canyon	SMB 2-7			
			Santa Ynez Canyon	SMB 2-2, SMB 2-3, SMB 2-6			
3	Santa Monica	City of Los Angeles County of Los Angeles	Santa Monica	SMB 3-1, SMB 3-2, SMB 3-3, SMB 3-4, SMB 3-5, SMB 3-6, SMB 3-7, SMB 3-8 [#] , SMB 3-9	257	237	203
4	Malibu	County of Los Angeles	Nicholas Canyon	SMB 4-1 [#]	14	14	14
5	Manhattan Beach	El Segundo Hermosa Beach Redondo Beach	Hermosa	SMB 5-1 [#] , SMB 5-2, SMB 5-3 [#] , SMB 5-4 [#] , SMB 5-5 [#]	29	29	29
6	Redondo Beach	Hermosa Beach Manhattan Beach Torrance County of Los Angeles	Redondo	SMB 6-1, SMB 6-2 [#] , SMB 6-3, SMB 6-4, SMB 6-5 [#] , SMB 6-6 [#]	58	57	56

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Jurisdiction Group	Primary Jurisdiction	Additional Responsible Jurisdictions & Agencies	Subwatershed(s)	Monitoring Site(s)	Interim Single Sample Bacteria Receiving Water Limitations as Maximum Allowable Exceedance Days during Wet Weather		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
7	Rancho Palos Verdes	City of Los Angeles Palos Verdes Estates Redondo Beach Rolling Hills Rolling Hills Estates Torrance County of Los Angeles	Palos Verdes Peninsula	SMB 7-1 [#] , SMB 7-2 [#] , SMB 7-3 [#] , SMB 7-4 [#] , SMB 7-5 [#] , SMB 7-6 [#] , SMB 7-7, SMB 7-8 [#] , SMB 7-9 [#]	36	36	36

For those beach monitoring locations subject to the antidegradation provision, there shall be no increase in exceedance days during the implementation period above that estimated for the beach monitoring location in the critical year.

* The California Department of Transportation (Caltrans) is a responsible agency in each Jurisdiction Group and is jointly responsible for complying with the allowable number of exceedance days. Caltrans is separately regulated under the Statewide Storm Water Permit for State of California Department of Transportation (NPDES No. CAS000003).

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- b. Permittees shall comply with the following grouped⁸ final single sample bacteria receiving water limitations for all shoreline monitoring stations along Santa Monica Bay beaches, except for those monitoring stations subject to the antidegradation implementation provision as established in the TMDL and identified in subpart c. below, during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2021:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
	Daily Sampling	Weekly Sampling
Summer Dry-Weather (April 1 to October 31)	0	0
Winter Dry-Weather (November 1 to March 31)	3	1
Wet Weather ⁹	17	3

- c. Permittees shall comply with the following grouped² final single sample bacteria receiving water limitations for shoreline monitoring stations along Santa Monica Bay beaches subject to the antidegradation provision as of the effective date of this Order:

		Annual Allowable Exceedance Days of the Single Sample Objective (days)			
Station ID	Beach Monitoring Location	Winter Dry Weather (November 1 – March 31)		Wet Weather (November 1 – October 31)	
		Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
SMB 1-4	Trancas Creek at Broad Beach	0	0	17	3
SMB 1-5	Zuma Creek at Zuma Beach	0	0	17	3
SMB 2-13	Imperial Highway storm drain	2	1	17	3
SMB 3-8	Windward Ave. storm drain at Venice Pavilion	2	1	13	2
SMB 4-1	San Nicholas Canyon Creek at Nicholas Beach	0	0	14	2
SMB 5-1	Manhattan Beach at 40th Street	1	1	4	1
SMB 5-2	28th Street storm drain at Manhattan Beach	0	0	17	3
SMB 5-3	Manhattan Beach Pier, southern drain	1	1	5	1

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⁸ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the sub-drainage area to each beach monitoring location.

⁹ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

		Annual Allowable Exceedance Days of the Single Sample Objective (days)			
Station ID	Beach Monitoring Location	Winter Dry Weather (November 1 – March 31)		Wet Weather (November 1 – October 31)	
		Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
SMB 5-4	Hermosa City Beach at 26th St.	3	1	12	2
SMB 5-5	Hermosa Beach Pier	2	1	8	2
SMB 6-2	Redondo Municipal Pier- 100 yards south	3	1	14	2
SMB 6-5	Avenue I storm drain at Redondo Beach	3	1	6	1
SMB 6-6	Malaga Cove, Palos Verdes Estates	1	1	3	1
SMB 7-1	Malaga Cove, Palos Verdes Estates	1	1	14	2
SMB 7-2	Bluff Cove, Palos Verdes Estates	1	1	0	0
SMB 7-3	Long Point, Rancho Palos Verdes	1	1	5	1
SMB 7-4	Abalone Cove, Rancho Palos Verdes	0	0	1	1
SMB 7-5	Portuguese Bend Cove, Rancho Palos Verdes	1	1	2	1
SMB 7-6	White's Point, Royal Palms County Beach	1	1	6	1
SMB 7-8	Point Fermin/Wilder Annex, San Pedro	1	1	2	1
SMB 7-9	Outer Cabrillo Beach	1	1	3	1

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- d. Permittees shall comply with the following geometric mean receiving water limitations for all shoreline monitoring stations along Santa Monica Bay beaches during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

B. Santa Monica Bay Nearshore and Offshore Debris TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-2.

2. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged into water bodies within the Santa Monica Bay WMA and then into Santa Monica Bay or on the shoreline of Santa Monica Bay no later than March 20, 2020¹⁰, and every year thereafter.
3. Permittees shall comply with interim and final water quality-based effluent limitations for trash discharged into Santa Monica Bay or on the shoreline of Santa Monica Bay, per the schedule below:

Permittees	Baseline ¹¹	Mar 20, 2016	Mar 20, 2017	Mar 20, 2018	Mar 20, 2019	Mar 20, 2020 ¹²
		(80%)	(60%)	(40%)	(20%)	(0%)
Annual Trash Discharge (gals/yr)						
Agoura Hills ¹³	1,044	835	626	418	209	0
Calabasas ¹⁰	1,656	1,325	994	663	331	0
Culver City	52	42	31	21	10	0
El Segundo	2,732	2,186	1,639	1,093	546	0
Hermosa Beach	1,117	894	670	447	223	0
Los Angeles, City of	25,112	20,090	15,067	10,045	5,022	0
Los Angeles, County of	5,138	4,110	3,083	2,055	1,028	0
Malibu	5,809	4,648	3,486	2,324	1,162	0
Manhattan Beach	2,501	2,001	1,501	1,001	500	0
Palos Verdes Estates	3,346	2,677	2,007	1,338	669	0
Rancho Palos Verdes	7,254	5,803	4,353	2,902	1,451	0
Redondo Beach	3,197	2,558	1,918	1,279	639	0
Rolling Hills	515	412	309	206	103	0
Rolling Hills Estates	365	292	219	146	73	0
Santa Monica	5,672	4,537	3,403	2,269	1,134	0
Torrance	2,484	1,987	1,490	993	497	0
Westlake Village ¹⁰	3,131	2,505	1,879	1,252	626	0

4. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in B.2 and B.3 above per the provisions in Part VI.E.5.

C. Santa Monica Bay TMDL for DDTs and PCBs (USEPA established)

1. Permittees subject to the provisions below are identified in Attachment K, Table K-2.

¹⁰ If a Permittee by November 4, 2013, adopts local ordinances to ban plastic bags, smoking in public places and single use expanded polystyrene food packaging then the final compliance date will be extended until March 20, 2023.

¹¹ If a Permittee elects not to use the default baseline, then the Permittee shall include a plan to establish a site specific trash baseline in their Trash Monitoring and Reporting Plan.

¹² Permittees shall achieve their final effluent limitation of zero trash discharge for the 2019-2020 storm year and every year thereafter.

¹³ Permittees shall be deemed in compliance with the water quality-based effluent limitation for trash established to implement the Santa Monica Bay Nearshore and Offshore Debris TMDL, if the Permittee is in compliance with the water quality-based effluent limitations established to implement the Malibu Creek Watershed Trash TMDL.

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2. Permittees shall comply with the following WLAs, expressed as an annual loading of pollutants from the sediment discharged to Santa Monica Bay, per the provisions in Part IV.E.3:

Constituent	Annual Mass-Based WLA (g/yr)
DDT	27.08
PCBs	140.25

3. Compliance shall be determined based on a three-year averaging period.

D. TMDLs in the Malibu Creek Subwatershed

1. Malibu Creek and Lagoon Bacteria TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-2.

- b. Water Quality-Based Effluent Limitations

- i. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Malibu Lagoon during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

- ii. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Malibu Creek and its tributaries during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
E. coli	235/100 mL	126/100 mL

- c. Receiving Water Limitations

- i. Permittees shall comply with the following grouped¹⁴ final single sample bacteria receiving water limitations for Malibu Creek, its tributaries, and

¹⁴ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area to the receiving water.

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Malibu Lagoon during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
	Daily Sampling	Weekly Sampling
Summer Dry-Weather (April 1 to October 31)	0	0
Winter Dry-Weather (November 1 to March 31)	3	1
Wet Weather ¹⁵	17	3

- ii. Permittees shall comply with the following geometric mean receiving water limitations for discharges to Malibu Lagoon during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

- iii. Permittees shall comply with the following geometric mean receiving water limitation for discharges to Malibu Creek and its tributaries during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
E. coli	126/100 mL

2. Malibu Creek Watershed Trash TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-2.
- b. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Malibu Creek from Malibu Lagoon to Malibou Lake, Malibu Lagoon, Malibou Lake, Medea Creek, Lindero Creek, Lake Lindero, and Las Virgenes Creek in the Malibu Creek Watershed no later than July 7, 2017 and every year thereafter.
- c. Permittees shall comply with interim and final water quality-based effluent limitations for trash discharged to the Malibu Creek, per the schedule below:

¹⁵ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.
Attachment M –TMDLs in the Santa Monica Bay WMA

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Permittees	Baseline	July 7, 2013 (80%)	July 7, 2014 (60%)	July 7, 2015 (40%)	July 7, 2016 (20%)	July 7, 2017 (0%)
	Annual Trash Discharge (gals/yr)					
Agoura Hills	1810	1448	1086	724	362	0
Calabasas	673	539	404	269	135	0
Hidden Hills	71	57	43	28	14	0
Los Angeles County	1117	894	670	447	223	0
Malibu	226	181	136	91	45	0
Westlake Village	143	114	86	57	29	0

d. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in D.2.b and D.2.c above per the provisions in Part VI.E.5.

3. Malibu Creek Watershed Nutrients TMDL (*USEPA established*)

a. Permittees subject to the provisions below are identified in Attachment K, Table K-2.

b. Permittees shall comply with the following grouped¹⁶ WLAs per the provisions in Part VI.E.3 for discharges to Westlake Lake, Lake Lindero, Lindero Creek, Las Virgenes Creek, Medea Creek, Malibu Lake, Malibu Creek and Malibu Lagoon and its tributaries. Tributaries to Malibu Creek and Lagoon, include the following upstream water bodies; Triunfo Creek, Palo Comado Creek, Cheesebro Creek, Strokes Creek and Cold Creek.

Time Period	WLA	
	Nitrate as Nitrogen plus Nitrite as Nitrogen	Total Phosphorus
	Daily Maximum	Daily Maximum
Summer (April 15 to November 15) ¹⁷	8 lbs/day	0.8 lbs/day
Winter (November 16 to April 14)	8 mg/L	n/a

E. TMDLs in the Ballona Creek Subwatershed

1. Ballona Creek Trash TMDL

a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.

¹⁶ USEPA was unable to specifically distinguish the amounts of pollutant loads from allocation categories associated with areas regulated by the storm water permits. Therefore, allocations for storm water permits are grouped.

¹⁷ The mass-based summer WLAs are calculated as the sum of the allocations for “runoff from developed areas” and “dry weather urban runoff.”

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- b. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Ballona Creek no later than September 30, 2015 and every year thereafter.
- c. Permittees shall comply with the interim and final water quality-based effluent limitations for trash discharged to Ballona Creek, per the schedule below:

**Ballona Creek Subwatershed Trash Effluent Limitations per Storm Year¹⁸
(pounds of drip-dry trash)**

Permittees	Baseline	Sept 30, 2012 (20%)	Sept 30, 2013 (10%)	Sept 30, 2014 (3.3%)	Sept 30, 2015 ¹⁹ (0%)
		Annual Trash Discharge (pounds of trash)			
Beverly Hills	70,712	14,142	7,071	2,333	0
Culver City	37,271	7,454	3,727	1,230	0
Inglewood	22,324	4,465	2,232	737	0
Los Angeles, City of	942,720	188,544	94,272	31,110	0
Los Angeles, County of	52,693	10,539	5,269	1,739	0
Santa Monica	2,579	516	258	85	0
West Hollywood	13,411	2,682	1,341	443	0

**Ballona Creek Subwatershed Trash Effluent Limitations per Storm Year
(gallons of uncompressed trash)**

Permittees	Baseline	Sept 30, 2012 (20%)	Sept 30, 2013 (10%)	Sept 30, 2014 (3.3%)	Sept 30, 2015 ¹⁶ (0%)
		Annual Trash Discharge (gallons of uncompressed trash)			
Beverly Hills	45,336	9,067	4,534	1,496	0
Culver City	25,081	5,016	2,508	828	0
Inglewood	14,717	2,943	1,472	486	0
Los Angeles, City of	602,068	120,414	60,207	19,868	0
Los Angeles, County of	32,679	6,536	3,268	1,078	0
Santa Monica	1,749	350	175	58	0
West Hollywood	9,360	1,872	936	309	0

- ~~d. Seventy-two (72) hours after each rain event, Permittees shall clean out and measure trash retained.~~

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¹⁸ For purposes of the provisions in this subpart, a storm year is defined as October 1 to September 30.

¹⁹ Permittees shall achieve their final water quality-based effluent limitation of zero trash discharged for the 2014-2015 storm year and every year thereafter.

~~e. Every 3 months during dry weather, Permittees shall clean out and measure trash retained.~~

f.d. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in E.1.b and E.1.c above per the provisions in Part VI.E.5.

2. Ballona Creek Estuary Toxic Pollutants TMDL

a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.

b. Permittees shall comply with the following final water quality-based effluent limitations no later than January 11, 2021, expressed as an annual loading of sediment-bound pollutants deposited to Ballona Creek Estuary:

Constituent	Effluent Limitations	
	Annual	Units
Cadmium	8.0	kg/yr
Copper	227.3	kg/yr
Lead	312.3	kg/yr
Silver	6.69	kg/yr
Zinc	1003	kg/yr
Chlordane	3.34	g/yr
DDTs	10.56	g/yr
Total PCBs	152	g/yr
Total PAHs	26,900	g/yr

c. Permittees shall comply with interim and final water quality-based effluent limitations for sediment-bound pollutant loads deposited to Ballona Creek Estuary, per the schedule below:

Deadline	Total Drainage Area Served by the MS4 required to meet the water quality-based effluent limitations (%)
January 11, 2013	25
January 11, 2015	50
January 11, 2017	75
January 11, 2021	100

d. Permittees shall be deemed in compliance with the water quality-based effluent limitations in Part E.2.b by demonstrating any one of the following:

i. Final water quality-based effluent limitations for sediment-bound pollutants deposited to Ballona Creek Estuary are met; or

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- ii. The sediment numeric targets as defined in the TMDL are met in bed sediments; or
- iii. Concentrations of sediments discharged meet the numeric targets for sediment as defined in the TMDL.

3. Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL

a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.

b. Water Quality-Based Effluent Limitations

- i. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Ballona Creek Estuary; Ballona Creek Reach 2 at the confluence with Ballona Creek Estuary; and Centinela Creek at the confluence with Ballona Creek Estuary during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

- ii. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Sepulveda Channel during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
E. coli	235/100 mL	126/100 mL

- iii. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Ballona Creek Reach 2; Ballona Creek Reach 1 at the confluence with Ballona Creek Reach 2; and Benedict Canyon Channel at the confluence with Ballona Creek Reach 2 during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
E. coli	576/100 mL	126/100 mL

- iv. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Ballona Creek Reach 1 during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

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Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
Fecal coliform	4000/100 mL	2000/100 mL

c. Receiving Water Limitations

- i. Permittees shall comply with the following grouped²⁰ single sample bacteria receiving water limitations for Ballona Creek Estuary; Ballona Creek Reach 2 at the confluence with Ballona Creek Estuary; Centinela Creek at the confluence with Ballona Creek Estuary; Ballona Creek Reach 2; Ballona Creek Reach 1 at the confluence with Reach 2; Benedict Canyon Channel at the confluence with Ballona Creek Reach 2; and Sepulveda Channel:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective		Deadline
	Daily Sampling	Weekly Sampling	
Summer Dry-Weather (April 1 to October 31)	0	0	April 27, 2013
Winter Dry-Weather (November 1 to March 31)	3	1	April 27, 2013
Wet Weather ²¹	17*	3	July 15, 2021

* In Ballona Creek Reach 2 and at the confluence with Reach 2, the greater of the allowable exceedance days under the reference system approach or high flow suspension shall apply.

- ii. Permittees shall not exceed the single sample bacteria objective of 4000/100 ml in more than 10% of the samples collected from Ballona Creek Reach 1 during any 30-day period. Permittees shall achieve compliance with this receiving water limitation during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021.
- iii. Permittees shall comply with the following geometric mean receiving water limitations for discharges to Ballona Creek Estuary; Ballona Creek Reach 2 at the confluence with Ballona Creek Estuary; and Centinela Creek at the confluence with Ballona Creek Estuary during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

- iv. Permittees shall comply with the following geometric mean receiving water limitation for discharges to Ballona Creek Reach 2; Ballona Creek Reach 1 at the confluence with Ballona Creek Reach 2; Benedict Canyon Channel at the

²⁰ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

²¹ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

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confluence with Ballona Creek Reach 2; and Sepulveda Channel during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
E. coli	126/100 mL

- v. Permittees shall comply with the following geometric mean receiving water limitation for discharges to Ballona Creek Reach 1 during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Fecal coliform	2000/100 mL

4. Ballona Creek Metals TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.

b. Final Water Quality-Based Effluent Limitations

- i. Permittees shall comply with the following dry weather²² water quality-based effluent limitations no later than January 11, 2016, expressed as total recoverable metals discharged to Ballona Creek and Sepulveda Channel:

Constituent	Effluent Limitation Daily Maximum (g/day)	
	Ballona Creek	Sepulveda Channel
Copper	807.7	365.6
Lead	432.6	196.1
Selenium	169	76
Zinc	10,273.1	4,646.4

- ii. In lieu of calculating loads, Permittees may demonstrate compliance with the following concentration-based water quality-based effluent limitations during dry weather²³ no later than January 11, 2016, expressed as total recoverable metals discharged to Ballona Creek and Sepulveda Channel:

Constituent	Effluent Limitation Daily Maximum (µg/L)
Copper	24

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²² Dry weather is defined as any day when the maximum daily flow in Ballona Creek is less than 40 cubic feet per second (cfs) measured at Sawtelle Avenue.

²³ Ibid.

Lead	13
Selenium	5
Zinc	304

iii. Permittees shall comply with the following wet weather²⁴ water quality-based effluent limitations no later than January 11, 2021, expressed as total recoverable metals discharged to Ballona Creek and its tributaries:

Constituent	Effluent Limitation Daily Maximum (g/day)
Copper	1.70×10^{-5} x daily storm volume (L)
Lead	5.58×10^{-5} x daily storm volume (L)
Selenium	4.73×10^{-6} x daily storm volume (L)
Zinc	1.13×10^{-4} x daily storm volume (L)

c. Permittees shall comply with interim and final water quality-based effluent limitations for metals discharged to Ballona Creek and its tributaries, per the schedule below:

Deadline	Total Drainage Area Served by the MS4 required to meet the water quality-based effluent limitations (%)	
	Dry weather	Wet weather
January 11, 2012	50	25
January 11, 2014	75	--
January 11, 2016	100	50
January 11, 2021	100	100

5. Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation (*USEPA established*)

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.
- b. Permittees shall comply with the following grouped²⁵ WLA per the provisions in Part VI.E.3 for discharges of sediment into Ballona Creek Wetlands:

Constituent	Annual WLA ²⁶ (m ³ /yr)
Total Sediment (suspended sediment plus sediment bed)	44,615

²⁴ Wet weather is defined as any day when the maximum daily flow in Ballona Creek is equal to or greater than 40 cubic feet per second (cfs) measured at Sawtelle Avenue.

²⁵ The WLA is group-based and shared among all MS4 Permittees located within the drainage area.

²⁶ The WLA is applied as a 3-year average.

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F. TMDLs in Marina del Rey Subwatershed

1. Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.
- b. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Marina del Rey Harbor Beach and Back Basins D, E, and F during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

c. Receiving Water Limitations

- i. Permittees shall comply with the following grouped²⁷ final single sample bacteria receiving water limitations for all monitoring stations at Marina Beach and Basins D, E, and F, except for those monitoring stations subject to the antidegradation provisions, during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2021.

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
	Daily Sampling	Weekly Sampling
Summer Dry-Weather (April 1 to October 31)	0	0
Winter Dry-Weather (November 1 to March 31)	3	1
Wet Weather ²⁸	17	3

- ii. Permittees shall comply with the following grouped²⁹ final single sample bacteria receiving water limitations for monitoring stations in Marina del Rey subject to the antidegradation provision as of the effective date of this Order:

	Annual Allowable Exceedance Days of the Single Sample Objective (days)
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REVISED TENTATIVE

²⁷ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

²⁸ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

²⁹ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

Station ID	Monitoring Location	Winter Dry Weather (November 1 – March 31)		Wet Weather (November 1 – October 31)	
		Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
MdRH-9	Basin F, center of basin	3	1	8	1

iii. Permittees shall comply with the following geometric mean receiving water limitations for monitoring stations at Marina Beach and Basins D, E, and F during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

2. Marina del Rey Harbor Toxic Pollutants TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.
- b. Permittees shall comply with the following final water quality-based effluent limitations no later than March 22, 2016³⁰, expressed as an annual loading of pollutants associated with total suspended solids (TSS) discharged to Marina del Rey Harbor Back Basins D, E, and F:

Constituent	Effluent Limitations	
	Annual	Units
Copper	2.01	kg/yr
Lead	2.75	kg/yr
Zinc	8.85	kg/yr
Chlordane	0.0295	g/yr
Total PCBs	1.34	g/yr

- c. Permittees shall comply with interim and final water quality-based effluent limitations for pollutant loads associated with TSS discharged to Marina del Rey Harbor Back Basins D, E, and F, per the schedule below:

³⁰ If an Integrated Water Resources Approach is approved by the Regional Water Board and implemented then the Permittees shall comply with the final water quality-based effluent limitations no later than March 22, 2021.

REVISITED TENTATIVE

Deadline	Total Drainage Area Served by the MS4 required to meet the effluent limitations (%)
March 22, 2014	50
March 22, 2016	100

- d. If an approved Integrated Water Resources Approach is implemented, Permittees shall comply with interim and final water quality-based effluent limitations for pollutant loads associated with TSS discharged to Marina del Rey Harbor Back Basins D, E, and F, per the schedule below:

Deadline	Total Drainage Area Served by the MS4 required to meet the effluent limitations (%)
March 22, 2013	25
March 22, 2015	50
March 22, 2017	75
March 22, 2021	100

- e. Permittees shall be deemed in compliance with the water quality-based effluent limitations in Part F.2.b by demonstrating any one of the following:
- i. Final water quality-based effluent limitations for pollutants associated with TSS discharged to Marina del Rey Harbor Back Basins D, E, and F are met; or
 - ii. The sediment numeric targets as defined in the TMDL are met in bed sediments; or
 - iii. Pollutant concentrations associated with TSS discharged meet the numeric targets for sediment as defined in the TMDL.

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ATTACHMENT N. TMDLs IN DOMINGUEZ CHANNEL AND GREATER HARBOR WATERS WATERSHED MANAGEMENT AREA

A. Los Angeles Harbor Bacteria TMDL (Inner Cabrillo Beach and Main Ship Channel)

1. Permittees subject to the provisions below are identified in Attachment K, Table K-4.
2. Permittees shall comply with the following final water quality-based effluent limitations for discharges to the Los Angeles Harbor Main Ship Channel, Los Angeles and Long Beach Inner Harbor, and Inner Cabrillo Beach as of the effective date of this Order:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

3. Receiving Water Limitations

- a. Permittees shall comply with the following final single sample bacteria receiving water limitations for the Los Angeles Harbor Main Ship Channel and Inner Cabrillo Beach:

Time Period	Receiving Water	Compliance Monitoring Location	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
			Daily sampling	Weekly sampling
Summer Dry-Weather (April 1 to October 31)	Inner Cabrillo Beach	CB1 & CB2	0	0
	Main Ship Channel	HW07	0	0
Winter Dry-Weather (November 1 to March 31)	Inner Cabrillo Beach	CB1 & CB2	0	0
	Main Ship Channel	HW07	3	1
Wet Weather ³¹	Inner Cabrillo Beach	CB1 & CB2	0	0
	Main Ship Channel	HW07	15	3

- b. Permittees shall comply with the following geometric mean receiving water limitations for the Los Angeles Harbor Main Ship Channel, Los Angeles and Long Beach Inner Harbor, and Inner Cabrillo Beach at all times:

³¹ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.
Attachment N –TMDLs in the Dominguez Channel and Greater Harbor Waters WMA

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Constituent	Geometric Mean
Total coliform	1,000 MPN/100 mL
Fecal coliform	200 MPN/100 mL
Enterococcus	35 MPN/100 mL

B. Machado Lake Trash TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-4.
2. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Machado Lake no later than March 6, 2016, and every year thereafter.
3. Permittees shall comply with interim and final water quality-based effluent limitations for trash discharged to Machado Lake, per the schedule below:

**Machado Lake Trash Water Quality-Based Effluent Limitations
(gallons of uncompressed trash per year)**

Permittees	Baseline ³²	3/6/2012 (80%)	3/6/2013 (60%)	3/6/2014 (40%)	3/6/2015 (20%)	3/6/2016 ³³ (0%)
		Annual Trash Discharge (gallons/yr)				
Carson	8141	6513	4885	3257	1628	0
Lomita	9393	7514	5636	3757	1879	0
City of Los Angeles	12331	9865	7399	4932	2466	0
Los Angeles County	8304	6643	4982	3322	1661	0
Los Angeles County Flood Control District	16	13	10	7	3	0
Palos Verdes Estates	1976	1581	1186	791	395	0
Rancho Palos Verdes	5227	4181	3136	2091	1045	0
Redondo Beach	18	15	11	7	4	0
Rolling Hills	7004	5603	4202	2801	1401	0
Rolling Hills Estates	14722	11777	8833	5889	2944	0
Torrance	34809	27847	20885	13924	6962	0

4. If a Permittee opts to derive a site specific trash generation rate through its Trash Monitoring and Reporting Plan (TMRP), the baseline limitation will be calculated by multiplying the point source area(s) by the derived trash generation rate(s).

³² The Regional Water Board calculated the baseline water quality-based effluent limitations for the Permittees based on the estimated trash generation rate of 5334 gallons of uncompressed trash per square mile per year.

³³ Permittees shall achieve their final effluent limitation of zero trash discharge for the 2015-2016 storm year and every year thereafter.

5. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in B.2 and B.3 above per the provisions in Part VI.E.5.

C. Machado Lake Nutrient TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-4.
2. Permittees shall comply with the following interim and final water quality-based effluent limitations for discharges to Machado Lake:

Deadline	Interim and Final Effluent Limitations	
	Monthly Average Total Phosphorus (mg/L)	Monthly Average Total Nitrogen (TKN+NO ₃ -N+NO ₂ -N) (mg/L)
As of the effective date of this Order	1.25	3.5
March 11, 2014	1.25	2.45
September 11, 2018	0.10	1.0

3. Compliance Determination

- a. Permittees may be deemed in compliance with the water quality-based effluent limitations by actively participating in a Lake Water Quality Management Plan (LWQMP) and attaining the receiving water limitations for Machado Lake. The City of Los Angeles has entered into a Memorandum of Agreement with the Regional Water Board to implement the LWQMP and reduce external nutrient loading to attain the following receiving water limitations:

Deadline	Interim and Final Receiving Water Limitations	
	Monthly Average Total Phosphorus (mg/L)	Monthly Average Total Nitrogen (TKN+NO ₃ -N+NO ₂ -N) (mg/L)
As of the effective date of this Order	1.25	3.5
March 11, 2014	1.25	2.45
September 11, 2018	0.10	1.0

- b. Permittees may be deemed in compliance with water quality-based effluent limitations by demonstrating reduction of total nitrogen and total phosphorous on an annual mass basis measured at the storm drain outfall of the Permittee's drainage area where approved by the Regional Water Board Executive Officer based on the results of a special study by the Permittee.³⁴

- i. The County of Los Angeles submitted a special study work plan, which was approved by the Regional Water Board Executive Officer, and established the following annual mass-based water quality based effluent limitations:

Deadline	Interim and Final Effluent Limitations
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³⁴ The annual mass-based allocation shall be equivalent to a monthly average concentration of 0.1 mg/L total phosphorus and 1.0 mg/L total nitrogen based on approved flow conditions.

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	Annual Load Total Phosphorus (kg)	Annual Load Total Nitrogen (TKN+NO ₃ -N+NO ₂ -N) (kg)
March 11, 2014	887	1739
September 11, 2018	71	710

- ii. The City of Torrance submitted a special study work plan, which was approved by the Regional Water Board Executive Officer, and established the following annual mass-based water quality based effluent limitations:

Deadline	Interim and Final Effluent Limitations	
	Annual Load Total Phosphorus (kg)	Annual Load Total Nitrogen (TKN+NO ₃ -N+NO ₂ -N) (kg)
March 11, 2014	3,760	7,370
September 11, 2018	301	3008

D. Machado Lake Pesticides and PCBs TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-4.
2. Permittees shall comply with the following water quality-based effluent limitations for discharges of suspended sediments to Machado Lake, applied as a 3-year average no later than September 30, 2019:

Pollutant	Effluent Limitations for Suspended Sediment-Associated Contaminants (µg/kg dry weight)
Total PCBs	59.8
DDT (all congeners)	4.16
DDE (all congeners)	3.16
DDD (all congeners)	4.88
Total DDT	5.28
Chlordane	3.24
Dieldrin	1.9

E. Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Tables K-4 and K-13.
2. Permittees shall comply with the ~~following~~ interim water quality-based effluent limitations for ~~discharges to Dominguez Channel and Torrance Lateral~~ listed below, as of the effective date of this Order:
 - a. Permittees shall comply with the following interim water quality-based effluent limitations for discharges to Dominguez Channel freshwater during ~~W~~wet ~~W~~weather;

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- i. The freshwater toxicity interim water quality-based effluent limitation is 2 TUc. The freshwater interim effluent limitation shall be implemented as a trigger requiring initiation and implementation of the TRE/TIE process as outlined in US EPA’s “Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications Under the National Pollutant Discharge Elimination System Program” (2000).
- ii. Permittees shall comply with the following interim metals water quality-based effluent limitations for discharges to the Dominguez Channel freshwater and Torrance Lateral during wet weather:

Metals	Interim Effluent Limitation Daily Maximum (µg/L)
Total Copper	207.51
Total Lead	122.88
Total Zinc	898.87

- b. Permittees shall comply with the following interim concentration-based water quality-based effluent limitations for pollutant concentrations in the sediment discharged to the Dominguez Channel Estuary and Greater Los Angeles and Long Beach Harbor Waters:

Water Body	Interim Effluent Limitations Daily Maximum (mg/kg sediment)					
	Copper	Lead	Zinc	DDT	PAHs	PCBs
	Dominguez Channel Estuary (below Vermont Avenue)	220.0	510.0	789.0	1.727	31.60
Long Beach Inner Harbor	142.3	50.4	240.6	0.070	4.58	0.060
Los Angeles Inner Harbor	154.1	145.5	362.0	0.341	90.30	2.107
Long Beach Outer Harbor (inside breakwater)	67.3	46.7	150	0.075	4.022	0.248
Los Angeles Outer Harbor (inside breakwater)	104.1	46.7	150	0.097	4.022	0.310
Los Angeles River Estuary	53.0	46.7	183.5	0.254	4.36	0.683
San Pedro Bay Near/Off Shore Zones	76.9	66.6	263.1	0.057	4.022	0.193
Los Angeles Harbor - Cabrillo Marina	367.6	72.6	281.8	0.186	36.12	0.199
Los Angeles Harbor - Consolidated Slip	1470.0	1100.0	1705.0	1.724	386.00	1.920
Los Angeles Harbor - Inner Cabrillo Beach Area	129.7	46.7	163.1	0.145	4.022	0.033
Fish Harbor	558.6	116.5	430.5	40.5	2102.7	36.6

- 3. Permittees shall comply with the final water quality-based effluent limitations as listed below no later than March 23, 2032, and every year thereafter:
 - a. Dominguez Channel Freshwater – Wet Weather
 - i. Freshwater Toxicity Effluent Limitation shall not exceed the monthly median of 1 TUc.

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- ii. Permittees shall comply with the following final metals water quality-based effluent limitations for discharges to Dominguez Channel and all upstream reaches and tributaries of Dominguez Channel above Vermont Avenue:

Metals	Water Column Mass-Based Final Effluent Limitation Daily Maximum ³⁵ (g/day)
Total Copper	1,300.3
Total Lead	5,733.7
Total Zinc	9,355.5

b. Torrance Lateral Freshwater and Sediment – Wet Weather

- i. Permittees shall comply with the following final metals water quality-based effluent limitations for discharges to the Torrance Lateral:

Metals	Water Column Effluent Limitation Daily Maximum ³⁶ (unfiltered, µg/L)
Total Copper	9.7
Total Lead	42.7
Total Zinc	69.7

- ii. Permittees shall comply with the following final concentration-based water quality-based effluent limitations for pollutant concentrations in the sediment discharged to the Torrance Lateral:

Metals	Concentration-Based Effluent Limitation Daily Maximum (mg/kg dry)
Total Copper	31.6
Total Lead	35.8
Total Zinc	121

c. Dominguez Channel Estuary and Greater Los Angeles and Long Beach Harbor Waters

- i. Permittees shall comply with the following final mass-based water quality-based effluent limitations, expressed as an annual loading of pollutants in the sediment deposited to Dominguez Channel Estuary, Los Angeles River Estuary, and the Greater Los Angeles and Long Beach Harbor Waters:

³⁵ Effluent limitations are based on a hardness of 50 mg/L, and 90th percentile of annual flow rates (62.7 cfs) in Dominguez Channel. Recalculated mass-based effluent limitations using ambient hardness and flow rate at the time of sampling are consistent with the assumptions and requirements of the TMDL. In addition to the effluent limitations above, samples collected during flow conditions less than the 90th percentile of annual flow rates must demonstrate that the acute and chronic hardness dependent water quality criteria provided in the California Toxics Rule (CTR) are achieved.

³⁶ Effluent limitations are based on a hardness of 50 mg/L. Recalculated concentration-based effluent limitations using ambient hardness at the time of sampling are consistent with the assumptions and requirements of the TMDL. In addition to the effluent limitations above, samples collected during flow conditions less than the 90th percentile of annual flow rates must demonstrate that the acute and chronic hardness dependent water quality criteria provided in the CTR are achieved.

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Water Body	Final Effluent Limitations Annual (kg/yr)			
	Total Cu	Total Pb	Total Zn	Total PAHs
Dominguez Channel Estuary	22.4	54.2	271.8	0.134
Consolidated Slip	2.73	3.63	28.7	0.0058
Inner Harbor	1.7	34.0	115.9	0.088
Outer Harbor	0.91	26.1	81.5	0.105
Fish Harbor (POLA)	0.00017	0.54	1.62	0.007
Cabrillo Marina (POLA)	0.0196	0.289	0.74	0.00016
San Pedro Bay	20.3	54.7	213.1	1.76
LA River Estuary	35.3	65.7	242.0	2.31

- ii. Permittees shall comply with the following final concentration-based water quality-based effluent limitations for pollutant concentrations in the sediments discharged to the Dominguez Channel Estuary, Consolidated Slip, and Fish Harbor:

Water Body	Effluent Limitations Daily Maximum (mg/kg dry sediment)		
	Cadmium	Chromium	Mercury
Dominguez Channel Estuary	1.2	--	--
Consolidated Slip	1.2	81	0.15
Fish Harbor	--	--	0.15

- d. Permittees shall comply with the following final mass-based water quality-based effluent limitations, expressed as an annual loading of total DDT and total PCBs in the sediment deposited to Dominguez Channel Estuary, Los Angeles River Estuary, and the Greater Los Angeles and Long Beach Harbor Waters:

Water Body	Final Effluent Limitations Annual (g/yr)	
	DDT total	PCBs total
Dominguez Channel Estuary	0.250	0.207
Consolidated Slip	0.009	0.004
Inner Harbor	0.051	0.059
Outer Harbor	0.005	0.020
Fish Harbor	0.0003	0.0019
Cabrillo Marina	0.000028	0.000025
Inner Cabrillo Beach	0.0001	0.0003
San Pedro Bay	0.049	0.44
LA River Estuary	0.100	0.324

4. Compliance Determination

- a. Permittees shall be deemed in compliance with the interim concentration-based water quality-based effluent limitations for pollutant concentrations in the Attachment N –TMDLs in the Dominguez Channel and Greater Harbor Waters WMA

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sediment as listed above in part E.2.b by meeting any one of the following methods:

- i. Demonstrate that the sediment quality condition of *Unimpacted* or *Likely Unimpacted* via the interpretation and integration of multiple lines of evidence as defined in the Sediment Quality Objectives (SQO) Part 1, is met; or
 - ii. Meet the interim water quality-based effluent limitations in bed sediment over a three-year averaging period; or
 - iii. Meet the interim water quality-based effluent limitations in the discharge over a three-year averaging period.
- b.** Permittees shall be deemed in compliance with the final fresh water metals water quality-based effluent limitations for discharges to Dominguez Channel and Torrance Lateral as listed above in parts E.3.a.ii and E.3.b.i by meeting any one of the following methods:
- i. Final metals water quality-based effluent limitations are met; or
 - ii. CTR total metals criteria are met instream; or
 - iii. CTR total metals criteria are met in the discharge.
- c.** Permittees shall be deemed in compliance with the final water quality-based effluent limitations for pollutants in the sediment as listed above in parts E.3.c.i and E.3.c.ii by meeting any one of the following methods:
- i. Final water quality-based effluent limitations for pollutants in the sediment are met; or
 - ii. The qualitative sediment condition of *Unimpacted* or *Likely Unimpacted* via the interpretation and integration of multiple lines of evidence as defined in the SQO Part 1, is met, with the exception of chromium, which is not included in the SQO Part 1; or
 - iii. Sediment numeric targets are met in bed sediments over a three-year averaging period.
- d.** Permittees shall be deemed in compliance with the final water quality-based effluent limitations for total DDT and total PCBs in the sediment as listed above in part E.3.d by meeting any one of the following methods:
- i. Fish tissue targets are met in species resident to the specified water bodies³⁷; or
 - ii. Final water quality-based effluent limitations for pollutants in the sediment are met; or
 - iii. Sediment numeric targets to protect fish tissue are met in bed sediments over a three-year averaging period; or

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³⁷ A site-specific study to determine resident species shall be submitted to the Regional Water Board Executive Officer for approval.

- iv.** Demonstrate that the sediment quality condition protective of fish tissue is achieved per the State Water Board's Statewide Enclosed Bays and Estuaries Plan.

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**ATTACHMENT R. TMDLs IN THE MIDDLE SANTA ANA RIVER WATERSHED
MANAGEMENT AREA (SANTA ANA REGION TMDL)****A. Middle Santa Ana River Watershed Bacterial Indicator TMDLs**

1. Permittees subject to the provisions below are identified in Attachment K, Table K-8.
2. Permittees shall comply with the following final water quality-based effluent limitations for discharges to San Antonio Creek and Chino Creek during dry weather no later than December 31, 2015, and during wet weather no later than December 31, 2025:
 - a. Fecal coliform⁶⁵: geometric mean less than 180 organisms/100 mL based on five or more samples during any 30-day period, and not more than 10% of the samples exceed 360 organisms/100 mL during any 30-day period.
 - b. *E. coli*: ~~*E. coli*~~: geometric mean less than 113 organisms/100 mL based on five or more samples during any 30-day period, and not more than 10% of the samples exceed 212 organisms/100 mL during any 30-day period.
3. Permittees shall comply with the following receiving water limitations for discharges to San Antonio Creek and Chino Creek during dry weather no later than December 31, 2015, and during wet weather no later than December 31, 2025:
 - a. Fecal coliform⁶⁶: geometric mean less than 200 organisms/100 mL based on 5 samples during any 30-day period, and not more than 10% of the samples exceed 400 organisms/100 mL during any 30-day period.
 - b. *E. coli*: geometric mean less than 126 organisms/100 mL based on 5 samples during any 30-day period, and not more than 10% of the samples exceed 235 organisms/100 mL during any 30-day period.

B. Section A of this Attachment R shall not be applicable during the effective dates of any NPDES permit that:

1. Is issued by the Regional Water Quality Control Board, Santa Ana Region, pursuant to a valid and enforceable designation agreement between this Regional Board and the Santa Ana Regional Board under Water Code section 13228, that is applicable to MS4 discharges by the Permittees identified in Attachment K, Table K-8; and
2. The designation agreement delegates the Santa Ana Regional Board as the regulator MS4 of discharges by the Permittees identified in Attachment K, Table K-8, to ensure compliance with the Middle Santa Ana River Watershed Bacterial Indicator TMDLs, Resolution No. R8-2005-0001, in satisfaction of the requirements of 40 CFR section 122.44(d)(1)(vii)(B).

⁶⁵ The fecal coliform water quality-based effluent limitations become ineffective upon the replacement of the REC-1 fecal coliform water quality objectives with REC-1 *E. coli* water quality objectives in the Santa Ana Region Basin Plan.

⁶⁶ The fecal coliform receiving water limitations become ineffective upon the replacement of the REC-1 fecal coliform water quality objectives with REC-1 *E. coli* water quality objectives in the Santa Ana Region Basin Plan.

**California Regional Water Quality Control Board, Los Angeles Region
 Los Angeles County MS4 Permit
 Supplementary Response to Comments on the Tentative Order
 MINIMUM CONTROL MEASURES MATRIX**

Section/Topic	Comment	Commenter(s)	Response	Change Made
<i>Provisions</i>				
	<p>Extensive monitoring studies conducted by CDPH between 1999 and 2011 have documented that mosquitoes opportunistically breed in structural stormwater Best Management Practices (BMPs), particularly those that hold standing water for over 96 hours. These structures create a potential public health concern and increase the burden on local vector control agencies that are mandated to inspect for and abate mosquitoes and other vectors within their jurisdictional boundaries. These unintended public health consequences can be lessened when structures incorporate design, construction, and maintenance principles developed specifically to minimize standing water available to mosquitoes while having negligible effects on the capacity of the BMPs to provide water quality improvements as intended.</p>	<p>CDPH</p>	<p>Appendix H includes technical specifications for LID BMPs, including criteria for Bioretention and Biofiltration BMPs to drain below the planting soil in less than 48 hours and completely drain in less than 96 hours. See Attachment H, Part 2.a.</p> <p>Additionally, Appendix H includes technical specifications for rainwater harvesting, including that harvested rainwater is stored in a manner that precludes the breeding of mosquitoes or other vectors or with a draw down not to exceed 96 hours. See Attachment H, Part 4.d.</p>	<p>No change made.</p>

Section/Topic	Comment	Commenter(s)	Response	Change Made
	<p>It is critical that the capacity for vector control agencies to apply public health pesticides to MS4s is protected by not imposing additional restrictions. To this end, public health pesticides specifically should be included as exempted discharges into permitted MS4s.</p>	<p>CDPH</p>	<p>The discharge of biological and residual pesticides to waters of the US from larvicide and adulticide applications for vector control may pose a threat to existing and potential beneficial uses of waters of the US if not properly controlled and regulated. The Clean Water Act (CWA), at section 301(a), broadly prohibits the discharge of any pollutant to waters of the US, except in compliance with an NPDES permit. Biological and residual pesticides discharged into surface waters constitute pollutants within the meaning of the CWA even if the discharge is in compliance with the registration requirements of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). Therefore, coverage under an NPDES permit is required. The draft tentative order does not prohibit authorized non-storm water discharges separately regulated by an individual or general NPDES permit. Discharges of biological and residual pesticides to waters of the US are covered under WQ Order No. 2012-0003-DWQ. A categorical exemption for these types of discharges to the LA County MS4 would be contrary to the CWA and implementing regulations.</p>	<p>No change made.</p>

Section/Topic	Comment	Commenter(s)	Response	Change Made
	<p>CDPH respectfully requests that the Board strongly consider the addition of specific and concise language to the Draft Tentative Order, <u>Order No. R4-2012-XXXX</u>, that:</p> <ul style="list-style-type: none"> • draws attention to the potential unintended consequences associated with stormwater management structures (i.e., mosquito production); specifically, structural BMPs and certain Low Impact Development (LID) site design measures such as rainwater capture systems • requires that MS4s operating under this NPDES General Permit minimize the potential for mosquito production in structural BMPs and certain LID site design measures capable of holding standing water to the maximum extent practicable • requires that MS4s operating under this NPDES General Permit provide, on an annual basis, a list of structural BMPs and certain LID site design measures capable of holding standing water to the local vector control agency to facilitate routine inspections and control of vectors if necessary, and 		<p>The Tentative order requires that LID and Hydromodification Control BMPs are properly selected, designed and maintained to avoid the breeding of vectors. See Part VI.D.6.a.i.(6).</p> <p>The Tentative order addresses drainage criteria for bioretention and biofiltration BMPs in Attachment H. As proposed, these criteria are consistent with the <i>California Department of Public Health. (2012). Best Management Practices for Mosquito Control in California</i>, which indicates that structures designed to drain captured water within 96 hours minimize the potential for breeding vectors.</p> <p>The Tentative order also requires MS4 Permittees</p> <ul style="list-style-type: none"> • to coordinate with other agencies as necessary to successfully implement the provisions of the order (see Part VI.A.4.a.iii), and • to implement a tracking system for new development and re-development post-construction BMPs. This tracking system will contain information on the types and locations of post-construction BMPs. This information could be made available by MS4 Permittees to vector control agencies, upon request. See Part VI.D.6.d.iv. 	<p>No change made.</p>

Section/Topic	Comment	Commenter(s)	Response	Change Made
	<p>The April 27, 2012 revision to the Fact Sheet for NPDES Permit No. CAS000003 ORDER No. 2012-XX-DWQ, State of California Department of Transportation included a paragraph on page 18 entitled <i>Potential Unintended Public Health Concerns Associated with Structural BMPs</i>. We propose that the Board consider the addition of a similar paragraph to the Fact Sheet of the Tentative Draft Order for the purpose of raising awareness of the potential unintended consequences associated with the implementation of certain stormwater management structures and public health obligations of owner /operators as defined in the California Health and Safety Code.</p>	CDPH	<p>Staff revised the Fact Sheet to include the following language: <i>Monitoring studies conducted by the California Department of Public Health (CDPH) have documented that mosquitoes opportunistically breed in structural storm water Best Management Practices (BMPs), particularly those that hold standing water for over 96 hours. Certain Low Impact Development (LID) site design measures that hold standing water such as rainwater capture systems may similarly produce mosquitoes. BMPs and LID design features should incorporate design, construction, and maintenance principles to promote drainage within 96 hours to minimize standing water available to mosquitoes. This Order requires regulated MS4 Permittees to coordinate with other agencies necessary to successfully implement the provisions of this Order. These agencies may include CDPH and local mosquito and vector control agencies on vector-related issues surrounding implementation of post-construction BMPs.</i></p>	Language in the Fact Sheet revised to incorporate suggested language.
	<p>The reference cited in Section 6.a.i.(6) in the footnotes should be updated. Please replace it with the following</p> <p>²⁶ <i>Structures designed to drain captured water within 96 hours minimize the potential for breeding vectors. See California Department of Public Health, Best Management Practices for Mosquito Control in California (2012) at http://www.westnile.ca.gov/resources.php</i></p>	CDPH	Staff has revised the footnote to reflect the more recent reference.	Order revised.
	<p>A large portion of Statewide and Regional stormwater NPDES permits have incorporated a Finding related to the potential for vector production in certain structural stormwater structures. Such a Finding ensures that Permittees are fully aware that certain stormwater structures unintentionally may produce vectors, particularly mosquitoes, and encourages collaboration with public health agencies that control vectors to mitigate any breeding that may occur. Please consider including the following language as a separate Finding and the associated reference as a footnote.</p>	CDPH	<p>The draft tentative order addresses this issue in several places in Part VI.D.6 and Attachment H. Additionally staff revised the Fact Sheet to include language regarding this issue. The Fact Sheet constitutes part of the findings of the Los Angeles Water Board for this Order. See Finding I.</p>	Language in the Fact Sheet revised.

Section/Topic	Comment	Commenter(s)	Response	Change Made
FIFRA Regulated Discharges	<p>The management of vector populations and public health has become increasingly difficult with the inclusion of additional regulations under NPDES. We fully support the vector related language proposed for inclusion in the above tentative Order by the California Department of Public Health (CDPH). In addition to the CDPH suggestions we would like the Board to address the following concerns:</p> <ul style="list-style-type: none"> The additional burdens on vector control agencies created by the 2011 Statewide NPDES Permit (Water Quality Order No. 2011-0002-DWQ, General Permit No. CAG 990004) directly impact the efficiency of field operations to control vector mosquitoes. Consequently, both the statewide as well as the national mosquito control association are aiming to regain NPDES exemption of public health pesticide applications and return such applications solely to regulation under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). To ensure our ability to continue our control efforts in the future, we would like to see the language under section VI.A 	San Gabriel Valley Mosquito and Vector Control District, and Greater Los Angeles County Vector Control District	<p>Comment Noted. The proposed Order is based on laws and policy in effect at the time of permitting. If future legislation or court decisions affect components of the permit, the Order may subsequently be reopened for review and modification, if necessary.</p> <p>The Regional Water Board staff agrees to include language similar to that included in the Ventura County MS4 Permit in the Fact Sheet of the Tentative Order, as follows: <i>This Order is not intended to prohibit the inspection for or abatement of vectors by the State Department of Public Health or local vector agencies in accordance with CA Health and Safety Code, § 116110 et seq. and Water Quality Order No. 2012-0003-DWQ.</i> However, the Regional Water Board staff believes that the Provision VI.A.10 is important and that the draft tentative order is clear in that pesticide applications that are currently authorized by an NPDES permit are allowed within the Proposed Order.</p>	Suggested language added to Attachment F, Part IV.A.5

Section/Topic	Comment	Commenter(s)	Response	Change Made
	<p>10. “prohibiting the discharge of any product registered under FIFRA to any waste stream that may ultimately be released to waters of the United States, unless specifically authorized elsewhere in this Order or another NPDES permit”, removed or have a specific exemption of public health pesticides added.</p> <ul style="list-style-type: none"> We find that while it has been stated that the existing Ventura County Municipal Separate Storm Sewer System Permit, Order No. 09-0057, NPDES Permit No CAS004002 has served as a template in crafting this tentative order, important vector control related language has been omitted in this draft. We ask that the Board consider including the following language from the FINDINGS section F of the Ventura County MS4 permit as a part of the language proposed by CDPH for this section: <p><i>This Order is not intended to prohibit the inspection for or abatement of vectors by the State Department of Public Health or local vector agencies in accordance with CA Health and Safety Code, § 116110 et seq. Certain Treatment Control BMPs if not properly designed, operated or maintained may create habitats for vectors (e.g. mosquitoes and rodents).</i></p>			

Section/Topic	Comment	Commenter(s)	Response	Change Made
Low Impact Development	Page 70, section VI.D.6.c.ii.(1) should be revised to, “In instances of technical infeasibility or where a project has been determined to provide an opportunity to replenish regional ground water supplies at an offsite location where ground water can be used for beneficial purposes, each Permittee may...”	US EPA	The Board agrees and will include the language consistent with the suggestion.	Changes made to Order.
Low Impact Development	Page 71, section VI.D.6.c.ii.(2)(d) should be revised to, “Brownfield development sites where infiltration poses a risk of causing pollutant mobilization.”	US EPA	The Board agrees that the circumstances where technical infeasibility exists due to a risk of creating pollutant mobilization should be clarified.	Changes made to Order.
Low Impact Development	There are three documents cited on page F-62 of the fact sheet where a reference citation was not included – the study by “Hawley et al.”, the USGS study and the Grand River TMDL. We suggest footnotes which would provide the reference information.	US EPA	The Fact Sheet has been revised to include the citations for the references, including: Hawley, 2011. “Effects of Urbanization on the Hydrologic Regimes and Geomorphic Stability of Small Streams in Southern California”; Cuffney, T.F., Brightbill, R.A., May, J.T., and Waite, I.R. 2010. Responses of Benthic Macroinvertebrates to Environmental Changes Associated with Urbanization in Nine Metropolitan areas, <i>Ecological Applications</i> , 20(5): 1384–1401; Ohio EPA, Grand River (lower) TMDL http://www.epa.ohio.gov/portals/35/tmdl/LowerGrand_PN_Report.pdf	Changes made to Fact Sheet.

**California Regional Water Quality Control Board, Los Angeles Region
Los Angeles County Municipal Storm Water Discharge Permit
Response to Comments on the Tentative Order
US EPA COMMENTS on TMDL and WMPs PROVISIONS**

Section/ Topic	Comment	Commenter	Response	Change Made
Watershed Management Programs (WMPs)	We found no mention of public review of WMPs in the fact sheet, and we recommend this be mentioned and stressed to ensure the public is fully aware of this opportunity and to encourage public review. For example, page F-40 of the fact sheet notes that a draft WMP must be submitted to the Board for approval within one year of adoption of the permit, but no mention is made of any opportunity for public review and comment.	US EPA	The Watershed Management Plans are subject to public review and the fact sheet will be revised to encourage public participation in reviewing the WMPs.	Change made to fact sheet

Section/ Topic	Comment	Commenter	Response	Change Made
Total Maximum Daily Load Requirements	<p>EPA further supports language concluding that if the Board determines a plan or schedule is inadequate, then compliance with the numeric WLAs and water quality objectives, as defined in the TMDL, must be met immediately. We believe such provisions will best assure water quality improvements. To reinforce the permit expectations as we understand them, we'd suggest the following specific changes:</p> <p>Page 114, section VI.E.3. next to last sentence should be revised to "In lieu of inclusion of numeric water quality based effluent limitations at this time, this Order requires the Permittees subject to WLAs in USEPA established TMDLs to propose and implement best management practices (BMPs) that will be effective in achieving compliance with USEPA established numeric WLAs."</p>	US EPA	The Board agrees that permit expectations should clearly delineate the compliance determination mechanism should Watershed Management Program or schedule be determined to be inadequate.	Changes made to Order.

Section/ Topic	Comment	Commenter	Response	Change Made
Total Maximum Daily Load Requirements	Page 115, section VI.E.3.c.iii. should be revised to: “A detailed time schedule of specific actions the Permittee will take in order to achieve compliance with the applicable WLAs.”	US EPA	The Board agrees and will revise the Order.	Changes made to Order
Watershed Management Program	Page 51, Section VI.C.3.b. iv.(1)(c) should be revised to: “If the Permittee(s) elects to eliminate a control measure identified in Part VI.D.4 to Part VI.D.9 because that specific control measure is not applicable to them, the Permittee(s) shall provide a justification for its elimination.”	US EPA	The Board agrees that the specific provisions provided by US EPA are appropriate and has revised the Order accordingly.	Changes made to Order
Watershed Management Program	Page 55, Section VI.C.6.b.ii. should be revised to clarify that the reference to modifying compliance deadlines or interim milestones does not apply to deadlines or milestones associated with TMDLs, but rather applies to new deadlines and milestones that are not including in this permit, but are developed pursuant to the Permittee(s)’ Watershed Management Program.	USEPA	The Board agrees and has clarified this provision.	Changes made to Order

EDMUND G. BROWN JR.
GOVERNORMATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Los Angeles Regional Water Quality Control Board

**Notice of Public Meeting
Thursday, November 8, 2012
8:00 a.m.**

Meeting Location:
**Southern California Association of Governments (Board Room)
818 West 7th Street, #1200
Los Angeles, California 90017**

Agenda

The Los Angeles Regional Board strives to conduct an accessible, orderly, and fair meeting. The Chair of the Board will conduct the meeting and establish appropriate rules and time limitations for each agenda item. The Board will only act on items designated as action items. Action items on the agenda are staff proposals, and may be modified by the Board as a result of public comment or Board member input. Additional information about Board meeting procedures is included after the last agenda item.

Generally, the Board accepts oral comments at the meeting on agenda items and accepts written materials regarding agenda items in advance of the meeting. For some items requiring public hearings, written materials and oral comments will be accepted only according to the procedures set forth in a previously issued public notice for the particular agenda item. To ensure a fair hearing and that the Board Members have an opportunity to fully study and consider written material, unless stated otherwise, written materials must be provided to the Executive Officer ***not later than 5:00 p.m. on October 29, 2012. Please consult the agenda item description because certain items may have an earlier deadline for written submissions. If you are considering submitting written materials, please consult the notes at the end of the agenda. Failure to follow the required procedures may result in your materials being excluded from the hearing record; however, failure to timely submit written materials does not preclude a person from testifying before the Board.***

INTRODUCTORY ITEMS

1. **Roll Call.**
2. **Order of Agenda.** Note that the agenda items are numbered for identification purposes only and may not necessarily be considered in this order.
3. **Approval of draft meeting minutes for the September 14, 2012, and October 4-5, 2012 Board meetings.** [Ronji Moffett, (213) 576-6612]

 MARIA MEHRANIAN, CHAIR | SAMUEL UNGER, EXECUTIVE OFFICER

 320 West 4th St., Suite 200, Los Angeles, CA 90013 | www.waterboards.ca.gov/losangeles

4. **Board Member Communications.**
 - 4.a. Ex Parte Disclosure. Board Members will identify any discussions they may have had requiring disclosure pursuant to Government Code section 11430.40.
 - 4.b. Board Member Reports. The Board Members may discuss communications, correspondence, or other items of general interest relating to matters within the Board's jurisdiction.
5. **Update from State Board.** [Fran Spivy-Weber, (916) 341-5607]

UNCONTESTED ACTION ITEMS

(Items marked with an asterisk are expected to be routine and noncontroversial. The Board will be asked to approve these items at one time without discussion. Any Board member or person may request that an item be removed from the uncontested calendar. Items removed from the Consent calendar will be heard at a future meeting.)

Waste Discharge Requirements that Serve as NPDES Permits

Amendment-

- *6. Consideration of tentative amendment to the Waste Discharge Requirements for TFX Aviation, Inc. (Former Terlair Site), Newbury Park; NPDES No. CA0064599. (Comment submittal deadline was September 27, 2012) [Rosario Aston, (213) 576-6653]

Amendment and Time Schedule Order-

- *7. Consideration of tentative amendment to the Waste Discharge Requirements and tentative Time Schedule Order for Donald T. Sterling Corporation (Sterling Ambassador Towers) Los Angeles; NPDES No. CA0053091 (Comment submittal deadline was October 4, 2012) [Rosario Aston, (213) 576-6653]

7.1 Waste Discharge Requirements

7.2 Time Schedule Order

Non-NPDES Waste Discharge Requirements

Revision-

- *8. Montebello Land and Water Inert Waste Landfill, Montebello; Order No. 97-066, File No. 70-029. (Comment submittal deadline was September 18, 2012) [Enrique Casas, (213) 620-2299]

CONTESTED ACTION ITEMS

NPDES Permit for Municipal Separate Storm Sewer System (MS4) Discharges within the Coastal Watersheds of Los Angeles County, with the exception of discharges originating from the City of Long Beach

Renewal-

9. Continuation of public hearing for consideration of the revised tentative National Pollutant Discharge Elimination System (NPDES) Permit for Municipal Separate Storm Sewer System (MS4) discharges within the Coastal Watersheds of Los Angeles County, with the exception of discharges originating from the City of Long Beach, NPDES No. CAS004001 (Revised Tentative Order). No new written materials may be submitted. Parties and interested persons will have the opportunity to address the Regional Board on the Revised Tentative Order as provided in the Notice of Opportunity for Public

Comment and Notice of Adoption Meeting dated October 18, 2012. The Board will accept oral comments only with respect to the revisions made since June 6, 2012, as reflected in track changes format in the Revised Tentative Order circulated on October 18, 2012. The Regional Board may adopt, modify, or deny the Revised Tentative Order, or continue the hearing to a later Board meeting. (*Written comments were due by noon on July 23, 2012.*) [Ivar Ridgeway, (213) 620-2150]

CLOSED SESSION

10. As authorized by Government Code section 11126, the Regional Board will be meeting in closed session. Closed session items are not open to the public. Items the Board may discuss include the following: [Jennifer Fordyce (JF) (916) 324-6682; Frances McChesney (FM), (916) 341-5174; Nicole Johnson (NJ) (916) 322-4142]
 - 10.1 *State Department of Finance, State Water Resources Control Board and Los Angeles Regional Water Quality Control Board v. Commission on State Mandates*, Los Angeles County Superior Court Case No. BS130730. [Challenging the Commission's decision that portions of the LA MS4 permit created unfunded state mandates]. (JF)
 - 10.2 *In re: Halaco Engineering Company*, United States Bankruptcy Court Central District of California, Northern Division, No. ND-02-1255 RR [Regarding a CDO and CAO at the Oxnard Property]. (JF)
 - 10.3 *In re: Los Angeles Region Water Permit – Ventura County*, Commission on State Mandate Test Claim No. 110-TC-01 [Regarding a test claim filed by Ventura County Watershed Protection District and the County of Ventura alleging that portions of Order No. R4-2010-0108 created an unfunded state mandate]. (JF)
 - 10.4 *In re: Petition of City of Redondo Beach for Review of Administrative Civil Liability Order No. R4-2008-0058-M, SWRCB/OCC File A-2124* [Challenging assessment of mandatory minimum penalties for violations of Order Nos. 99-057 and R4-2005-0016]. (FM)
 - 10.5 *In re: Petition of Signal Hill, Downey, et al, for Review of Order No. R4-2009-0130, SWRCB/OCC File A-2071* [Challenging the incorporation into the MS4 Permit of the Waste Load Allocations from the Los Angeles River Watershed Trash TMDL.]. (JF)
 - 10.6 *In re: Kinder Morgan, Inc., Chevron Corp., et al for Review of Revised Cleanup and Abatement Order No. R4-2008-0006, SWRCB/OCC File A-2085* [Challenging the revised cleanup goals in the order]. (FM)
 - 10.7 *In re: Upper Santa Clara River Chloride Total Maximum Daily Load Requirements Imposed by the Los Angeles Regional Water Quality Control Board in Resolution R40-2008-0012*. Commission on State Mandates Test Claim No. 10-TC-09 [Regarding a test claim filed by the Santa Clarita Valley Sanitation District of Los Angeles County alleging that portions of Resolution R4-2008-0012 created an unfunded state mandate]. (JF)
 - 10.8 *Joan C. Lavine v. State Water Resources Control Board and Los Angeles Regional Board*, Los Angeles County Superior Court Case No. BS128989 [Challenging the Basin Plan Amendment prohibiting on-site wastewater disposal systems in the Malibu Civic Center area]. (FM)
 - 10.9 *Charles Conway et al. v. State Water Resources Control Board and Los Angeles Regional Water Quality Control Board*, Ventura County Superior Court Case No.

- 56-2011-00399391-CU-WM-VTA [Challenging the McGrath Lake TMDL for polychlorinated biphenyls (PCBs), pesticides, and sediment toxicity]. (JF)
- 10.10 *In re: Petition of Santa Monica Baykeeper and Heal the Bay, SWRCB/OCC File A-2175* [Challenging the Memorandum of Understanding between the City of Malibu, the Los Angeles Regional Board, and the State Water Resources Control Board regarding phased implementation of the Basin Plan amendment prohibiting on-site wastewater disposal systems in the Malibu Civic Center area]. (FM)
- 10.11 *Green Acres, LLC v. Los Angeles regional Water Quality Control Board and State Water Resources Control Board*, Los Angeles County Superior Court Case No. BS138872 [Challenging the Basin Plan Amendment prohibiting on-site wastewater disposal systems in the Malibu Civic Center area]. (FM)
- 10.12 *Valeator, Inc. et al. v. Los Angeles Regional Water Quality Control Board*, Los Angeles County Superior Court Case No. BS138361 [Challenging Cleanup and Abatement Order No. R4-2011-0183 and associated Notice of Violation] (NJ)
- 10.13 Consultation with counsel about:
- (a) A judicial or administrative adjudicatory proceeding that has been formally initiated to which the Regional Board is a party;
 - (b) A matter that, based on existing facts and circumstances, presents significant exposure to litigation against the Regional Board; or
 - (c) A matter which, based on existing facts and circumstances, the Regional Board is deciding whether to initiate litigation. (JF/FM/NJ)
- 10.14 Consideration of the appointment, employment, or evaluation of performance about a public employee. (JF/FM/NJ)
11. **Adjournment of current meeting.** The next regular meeting of the Board will be held on December 6, 2012 at City of Simi Valley Council Chambers, 2929 Tapo Canyon Road, Simi Valley, CA 93063.

**

Ex Parte Communications: An ex parte communication is a communication to a board member from any person, about a pending matter, that occurs in the absence of other parties and without notice and opportunity for them to respond. The California Government Code prohibits the board members from engaging in ex parte communications during permitting, enforcement, and other “quasi-adjudicatory” matters. The Regional Board discourages ex parte communications during rulemaking and other “quasi-legislative” proceedings. The ex parte rules are intended to provide fairness, and to ensure that the board’s decisions are transparent, based on the evidence in the administrative record, and that evidence is used only if stakeholders have had the opportunity to hear and respond to it. Ex parte rules do not prevent anyone from providing information to the water boards or requesting that the water boards take a particular action. They simply require that the information come into the record through proper channels during a duly noticed, public meeting. A board member who has engaged or been engaged in a prohibited ex parte communication will be required to publicly disclose the communication on the record and may be disqualified from participating in the proceeding. For more information, please look at the ex parte questions and answers document found at www.waterboards.ca.gov/laws_regulations/docs/exparte.pdf

Procedures: The Regional Board follows procedures established by the State Water Resources Control Board. These procedures are established in regulations commencing with

section 647 of title 23 of the California Code of Regulations. The Chair may establish specific procedures for each item, and consistent with section 648, subdivision (d) of title 23 of the California Code of Regulations may waive nonstatutory provisions of the regulations. Generally, all witnesses testifying before the Regional Board must affirm the truth of their testimony and are subject to questioning by the Board Members. The Board does not, generally, require the designation of parties, the prior identification of witnesses, or the cross examination of witnesses. Generally, speakers are allowed three minutes for comments. Any requests for an alternate hearing process, such as requesting additional time to make a presentation, should be made to the Executive Officer in advance of the meeting, and under no circumstances later than 5:00 p.m. on the Thursday preceding the Board meeting. The provisions of this paragraph shall be deemed superseded to the extent that they are contradicted by a hearing notice specific to a particular agenda item.

Written Submissions: Written materials (whether hand-delivered, mailed, e-mailed, or facsimiled) *must be received prior to the relevant deadline* established in the agenda and public notice for an item. If the submitted material is more than 10 pages or contains foldouts, color graphics, maps, or similar items, 12 copies must be submitted prior to the relevant deadline.

Failure to comply with requirements for written submissions is grounds for the Chair to refuse to admit the proposed written comment or exhibit into evidence. (Cal. Code Regs. tit. 23, § 648.4(e).) The Chair may refuse to admit written testimony into evidence unless the proponent can demonstrate why he or she was unable to submit the material on time or that compliance with the deadline would otherwise create a hardship. In an adjudicatory matter, where there is a showing of prejudice to any party or the Board from admission of the written testimony, the Chair may refuse to admit it.

Administrative Record: Material presented to the Board as part of testimony that is to be made part of the record must be left with the Board. This includes photographs, slides, charts, diagrams, etc. All Board files pertaining to the items on this Agenda are hereby made a part of the record submitted to the Regional Board by staff for its consideration prior to action on the related items.

Accessibility: Individuals requiring special accommodations or language needs should contact Dolores Renick at (213) 576-6629 or drenick@waterboards.ca.gov at least ten working days prior to the meeting. TTY/TDD Speech-to-Speech users may dial 7-1-1 for the California Relay Service.

Availability of Complete Agenda Package: A copy of the complete agenda package is available for examination at the Regional Board Office during regular working hours (8:00 a.m. to 5:00 p.m. Monday through Friday) beginning 10 days before the Board meeting. Questions about specific items on the agenda should be directed to the staff person whose name is listed with the item.

Continuance of Items: The Board will endeavor to consider all matters listed on this agenda. However, time may not allow the Board to hear all matters listed. Matters not heard at this meeting may be carried over to the next Board meeting or to a future Board meeting. Parties will be notified in writing of the rescheduling of their item. Please contact the Regional Board staff to find out about rescheduled items.

Challenging Regional Board Actions: Pursuant to Water Code section 13320, any aggrieved person may file a petition to seek review by the State Water Resources Control Board of most actions taken by the Regional Board. A petition must be filed within 30 days of the action. Petitions must be sent to State Water Resources Control Board, Office of Chief Counsel; ATTN: Phil Wyels, Assistant Chief Counsel; 1001 "I" Street, 22nd Floor; Sacramento, CA 95814.

LYRIS MAILING

RB-AR20380

LIST NAME: 10-2612
 DATE MAILED: LA MSY COUNTY

DATEJOINED_	EMAILADDR_	FULLNAME_
2/2/2011 12:04	ADRIEN236@VLPRODUCE.COM	ADRIEN F. MADDALENO
6/22/2010 11:57	AEMiller@waterboards.ca.gov	Alan E. Miller
3/27/2012 13:25	Berry.Ueoka@EverestConsultants.com	Berry Ueoka
3/22/2012 15:22	BryantA@lwa.com	Bryant Alvarado
11/15/2010 7:46	CaliforniaWaterTechnologies@gmail.com	Carlos Aguilar
7/6/2009 13:38	City_manager@ci.glendora.ca.us	Chris Jeffers
11/16/2011 7:58	DLiu@DiamondBarCA.Gov	David G. Liu
6/11/2011 22:09	Daniel.Lee@Arcadis-us.com	Daniel K. Lee
2/22/2010 18:03	Dave@Bubalo.com	Dave Sorem
5/2/2011 6:54	Debbie.Neev@gmail.com	Deborah Neev
7/6/2009 13:58	EKiepke@WILLDAN.com	E. Kiepke
7/6/2009 13:21	FredLatham@santafesprings.org	Frederick W. Latham
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10/5/2010 11:14	Gerhardt.Hubner@ventura.org	Gerhardt Hubner
3/22/2010 15:01	Hamid.Tadayon@lacity.org	Hamid Tadayon
7/6/2009 13:07	James.Destefano@ci.diamond-bar.ca.us	James DeStefano
1/19/2010 11:06	Jeremy.Bock@Kiewit.com	Jeremy Bock
3/7/2012 16:27	Jim@CuratingLA.com	Jim Gilbert
7/6/2009 13:35	John.Beshay@westcovina.org	John Beshay
7/28/2011 16:10	Joyntventr@aol.com	Jayne Staley
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7/6/2009 13:53	Kaden.Young@culvercity.org	Kaden Young
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9/9/2009 9:15	ldods@counsel.lacounty.gov	Lauren E. Dods
11/9/2010 17:11	leo.raab@wecklabs.com	Leo Raab
11/7/2011 16:42	leverett@clwa.org	Lauren Everett
7/31/2009 16:20	lfeldman@localgovlaw.com	Lauren Feldman
11/6/2011 11:56	lilykaye@hotmail.com	Lily Kaye
6/28/2010 13:58	liz@smbaykeeper.org	Liz Crosson
7/6/2009 13:23	ljackson@torrnet.com	LeRoy Jackson
7/6/2009 13:20	lleblanc@cityofrosemead.org	Lou LeBlanc
4/19/2010 9:55	llough@bbinfrastructureinc.com	Lynn Lough
11/28/2010 20:36	lmckenney@sawpa.org	Larry McKenney
8/14/2012 11:35	lnaslund@dpw.lacounty.gov	Lisa Naslund
11/22/2010 12:05	lopezj@chevron.com	Joseph E. Lopez
4/21/2011 12:47	loriwolfe@wolfe-engineering.com	Lori Wolfe
7/6/2009 13:36	lpyeatt@comptoncity.org	Leslie Alan Pyeatt
8/15/2011 13:11	lreyes@lakewoodcity.org	Leon de los Reyes
8/22/2011 10:40	lskutecki@brwnald.com	Lisa Skutecki
4/5/2010 13:00	ltsoi@lacsds.org	Linda Tsoi
3/5/2012 14:15	luke.milick@lacity.org	Luke Milick
9/16/2009 9:53	mackw@lwa.com	Malcolm Walker
7/6/2009 13:39	malexander@lcf.ca.gov	Mark R. Alexander
11/1/2011 15:24	mali@waterboards.ca.gov	Mazhar Ali
2/14/2012 16:27	marcbeyeler@mac.com	marc Beyeler

8/25/2011 13:44 marisayrodriguez@gmail.com	Marisa Rodriguez
7/6/2009 13:11 mark-christoffels@longbeach.gov	Mark Christoffels
9/14/2010 10:01 markbaker@physislabs.com	Mark D. Baker
2/15/2011 13:45 martin.pastucha@smgov.net	Martin Pastucha
11/9/2010 15:47 martinagarnier@gmail.com	Martin Garnier
5/23/2012 7:38 matt.helon@sierrachemsales.com	Matt Helon
2/8/2011 14:00 matzrubber@sbcglobal.net	Phillip Jensen
8/7/2010 22:02 maya@cbeval.org	Maya Golden-Krasner
12/27/2011 16:30 mayorlutz@gmail.com	Mary Ann Lutz
12/11/2009 11:51 mbiedebach@sespeconsulting.com	mike biedebach
11/2/2011 10:36 mcarpenter@newhall.com	Matt Carpenter
7/6/2009 13:00 mdadian@cityofartesia.us	Maria Dadian
7/6/2009 13:45 mduran@ci.gardena.ca.us	Mike Duran
1/4/2011 13:31 meeker.lara@gmail.com	Lara Meeker
11/16/2011 7:52 meg_mcwade@ci.pomona.ca.us	Meg McWade
2/21/2012 11:12 melissa.pamer@dailynews.com	Melissa Pamer
9/20/2011 11:34 melissa.pena@ralphs.com	Melissa Pena
11/2/2010 19:35 memo1ah@gmail.com	
11/5/2009 6:46 metalkittiekat@aol.com	Nicole Bullum
11/7/2011 14:56 mfrancis@ddsfirm.com	Michael A. Francis
11/23/2011 11:41 mgarcia@tvmwd.com	Mario Garcia
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7/1/2010 14:57 michael.blum@gmail.com	Michael Blum
6/27/2012 9:47 michele_turton@baxter.com	
3/16/2012 0:41 miguel@urbansemillas.com	Miguel Luna
7/6/2009 13:36 mike.shay@redondo.org	Mike Shay
7/3/2012 21:39 mike@watershedhealth.org	Mike Antos
7/6/2009 13:05 mike_ogrady@ci.cerritos.ca.us	Mike O'Grady
6/2/2011 17:09 mitch@whitsoncm.com	Mitch Whitson
5/25/2012 21:27 mitchm@lwa.com	Mitch Mysliwiec
4/12/2011 13:43 mkadah@edmsvc.com	Michel Kadah
4/28/2011 10:03 mkearney@waterboards.ca.gov	Michelle Kearney
7/6/2009 13:04 mkeith@cityofbradbury.org	Michelle Keith
3/9/2010 9:38 mkinsler@wheelerandgray.com	Mary Kinsler
11/10/2011 10:26 mkirrene@verizon.net	Michael Kirrene
11/16/2011 8:44 mkolbensschlag@aei-casc.com	Michael Kolbensschlag
7/6/2009 13:08 mlansdell@ci.gardena.ca.us	Mitchell G. Lansdell
4/13/2012 15:01 mlcoffee@nossaman.com	Mary Lynn K. Coffee
9/26/2012 11:15 mmcmeechan@environcorp.com	Melissa McMeechan
7/6/2009 13:47 mmilhiser@cityoflamirada.org	Mike Milhiser
11/16/2011 8:00 mmostahkami@sogate.org	Mohammad Mostahkami
9/11/2012 15:52 mmotto@geosyntec.com	Megan Otto
7/6/2009 13:58 mmunoz@cityoflamirada.org	Marlin Munoz
11/16/2011 7:57 mogrady@cerritos.us	Mike OGrady
7/6/2009 13:47 moillataguerre@ci.glendale.ca.us	Maurice Oillataguerre
5/26/2010 8:55 morton.price@lacity.org	Morton Price
3/6/2012 11:30 mpassanisi@breeneng.com	Mercedes Passanisi

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7/31/2012 10:31 mthorme@downeybrand.com	Melissa Thorme
3/15/2011 9:30 mvazquez@golder.com	Misty Vazquez
9/14/2012 12:16 myanai@counsel.lacounty.gov	Mark Yanai
7/13/2012 11:30 myoung@awattorneys.com	Marie W. Young
11/8/2011 14:01 myriam.cardenas@smgov.net	Myriam Cardenas
7/24/2012 19:24 naomistone@mugenkioku.com	Naomi Stone
3/9/2010 9:28 nascarjws@yahoo.com	John Schwartz
7/6/2009 13:52 nasser.sh@lcf.ca.gov	Nasser Shoushtarian
5/20/2010 7:53 navedissian@quakercityplating.com	NICK AVEDISSIAN
7/29/2009 13:55 ndupont@rwglaw.com	Norman Dupont
7/6/2009 13:43 neal.shapiro@smgov.net	Neal Shapiro
11/5/2011 20:04 neilandeb@aol.com	Neil Dipprey
4/12/2010 8:26 nfelix@sarecycling.com	Nancy Felix
8/6/2009 11:06 ngarrison@nrdc.org	Noah Garrison
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8/13/2012 19:24 njohnson@waterboards.ca.gov	Nicole Johnson
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7/6/2009 13:43 ocramer@santa-clarita.com	Oliver Cramer
10/28/2011 14:52 ogalang@brwncald.com	Oliver D. Galang PE
11/9/2010 15:30 ogalang@dpw.lacounty.gov	Oliver Galang
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7/17/2009 15:05 paul.singarella@lw.com	Paul Singarella
5/4/2012 15:16 pauling.sun@tetrattech.com	Pauling Sun
1/12/2010 8:06 pcmsusa@hotmail.com	Raymond Wells PhD
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9/23/2010 7:17 rabbott5@toromail.csudh.edu	Rodney Abbott
2/1/2011 11:42 rasancho@dpw.lacounty.gov	Randall Sancho
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11/16/2011 9:01 rbeste@torranceca.gov	Rob Beste
7/6/2009 13:17 rbow@ci.monrovia.ca.us	Ron Bow
2/17/2012 9:50 rchristmann@waterboards.ca.gov	Rebecca Christmann
7/6/2009 13:22 rdickey@sogate.org	Robert T. Dickey
12/28/2011 16:43 rdrayse@treepeople.org	Rebecca Drayse
8/15/2011 13:46 reddy.pakala@ventura.org	Reddy Pakala
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11/16/2011 8:54 rick.valte@smgov.net	Rick Valte
7/6/2009 13:48 rkenny@soelmonte.org	Ron Kenny
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11/9/2011 16:38 rmontevideo@rutan.com	Richard Montevideo
10/27/2011 12:53 rnewman@santa-clarita.com	Robert Newman
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7/6/2009 13:41 robertz@ci.commerce.ca.us	Robert Zarrilli
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3/23/2011 11:22 rwang@dpw.lacounty.gov	Ruby Wang
4/8/2011 13:18 rwatson@rwaplanning.com	Richard A. Watson
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5/3/2010 17:44 selimeren@gmail.com	SELIM EREN
11/9/2010 15:56 seth.carr@lacity.org	seth carr
6/7/2012 10:43 sfleischli@nrdc.org	Steve Fleischli
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2/21/2012 8:50 shawn.hagerty@bbkllaw.com	Shawn Hagerty
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8/16/2012 16:37 simran@northeasttrees.org	Simran Sikand
7/6/2009 11:32 skelley@waterboards.ca.gov	Sandra Kelley

9/14/2012 14:28 smandegari@greenesol.com	shirin mandegari
2/23/2011 10:55 smartin@remet.com	Scott Martin
11/30/2009 14:50 smurow@moote.com	Steven Murow
11/16/2011 8:01 smyrter@cityofsignalhill.org	Steve Myrter
2/2/2011 14:43 snania@forester.net	
9/10/2009 15:31 snissman@bos.lacounty.gov	Susan Nissman
7/6/2009 13:46 sochoa@ci.monrovia.ca.us	Scott Ochoa
5/11/2012 14:33 soligeorge@chevron.com	Soli George
6/6/2012 16:51 sperlstein@weho.org	Sharon Perlstein
11/15/2011 15:20 srigg@ci.vernon.ca.us	Scott Rigg
5/31/2011 16:28 ssanchez@bialav.org	Sandy Sanchez
1/30/2012 13:55 ssantilena@healthebay.org	Susie Santilena
2/9/2012 12:40 sschuyler@biasc.org	steven schuyler
12/20/2011 12:32 stanleys@uppercrustent.com	Stanley Shimabuku
11/16/2011 8:59 steve.huang@redondo.org	Steve Huang
1/14/2010 14:32 stormwatercentral@gmail.com	Anna Hensley
6/19/2012 17:02 sturney@weho.org	Susannah Turney
5/31/2011 16:33 suhles@delanegroup.com	Scott Uhles
5/27/2012 12:38 suzi_youssef@ymail.com	Suzi Youssef
11/16/2011 8:46 swalker@cityofpasadena.net	Stephen Walker
5/27/2010 11:33 symeon.finch@orco.com	Symeon Finch
7/6/2009 13:08 szurn@ci.glendale.ca.us	Stephen M. Zurn
11/10/2011 9:40 tajenkins@sgvwater.com	Thomas A. Jenkins
6/8/2012 15:29 tattnlaw@gmail.com	JOHNTOMMY ROSAS
7/6/2009 13:04 tcoroalles@cityofcalabasas.com	Anthony Coroalles
7/31/2009 15:57 tford@smbaykeeper.org	Tom Ford
2/23/2012 8:33 tiffanyshedrick@santafesprings.org	Tiffany Shedrick
5/31/2011 16:30 tom.mitchell@pardeehomes.com	Tom Mitchell
12/15/2009 10:51 tony.barboza@latimes.com	Tony Barboza
3/23/2010 11:19 tony.pepe@csun.edu	Tony Pepe
9/16/2010 10:20 tony@csstudios.com	Tony Ignacio
2/20/2012 13:01 tracy@egoscuelaw.com	Tracy Egoscue
7/6/2009 13:10 trobinson@cityoflamirada.org	Tom E. Robinson
7/6/2009 11:29 trodgers@waterboards.ca.gov	Theresa Rodgers
11/14/2011 8:33 tsmith@bonterraconsulting.com	Thomas Smith
7/6/2009 12:59 ttait@ci.arcadia.ca.us	Tom Tait
7/6/2009 13:22 tybarra@soelmonte.org	Tony Ybarra
4/3/2011 19:01 uhdenr@metro.net	Roger Uhden
6/17/2011 20:16 uyeda@pbworld.com	Pamela Uyeda
7/6/2009 13:42 vcastro@ci.covina.ca.us	Vivian Castro
4/11/2011 13:02 vcastro@covinaca.gov	Vivian Castro
1/24/2011 11:30 vhevener@ci.arcadia.ca.us	Vanessa Hevener
11/7/2011 11:10 victor.kennedy@cshs.org	Victor Kennedy
11/16/2011 8:39 vpeterson@malibucity.org	Vic Peterson
10/28/2010 12:38 vsalazar@ldcla.com	Victor Salazar PE
7/6/2009 13:03 vsinghal@baldwinpark.com	Vijay Singhal
2/18/2011 11:31 wade@grahamstudio.net	Wade Graham

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6/29/2011 9:59	wcaffrey@vandermostconsulting.com	wade caffrey
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11/14/2011 16:14	wgross@lacsds.org	bill gross
8/6/2012 10:00	wjohnson@dpw.lacounty.gov	William Johnson
7/6/2009 13:52	wrlindinc@aol.com	Wes Lind
8/17/2011 11:33	wynesta@earthlink.net	Wynesta Dale
11/16/2011 8:58	ykwan@lcf.ca.gov	Ying Kwan
7/6/2009 13:35	ys@cityofrh.net	Yolanta Schwartz
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9/17/2010 8:45	zora.baharians@lacity.org	Zora

EDMUND G. BROWN JR.
GOVERNORMATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Los Angeles Regional Water Quality Control Board

Revised
Notice of Public Meeting
Thursday, November 8, 2012
8:00 a.m.

Revised Meeting Location Change:
Metropolitan Water District of Southern California (Board Room)
700 North Alameda Street
Los Angeles, California 90071

Agenda

The Los Angeles Regional Board strives to conduct an accessible, orderly, and fair meeting. The Chair of the Board will conduct the meeting and establish appropriate rules and time limitations for each agenda item. The Board will only act on items designated as action items. Action items on the agenda are staff proposals, and may be modified by the Board as a result of public comment or Board member input. Additional information about Board meeting procedures is included after the last agenda item.

Generally, the Board accepts oral comments at the meeting on agenda items and accepts written materials regarding agenda items in advance of the meeting. For some items requiring public hearings, written materials and oral comments will be accepted only according to the procedures set forth in a previously issued public notice for the particular agenda item. To ensure a fair hearing and that the Board Members have an opportunity to fully study and consider written material, unless stated otherwise, written materials must be provided to the Executive Officer ***not later than 5:00 p.m. on October 29, 2012. Please consult the agenda item description because certain items may have an earlier deadline for written submissions. If you are considering submitting written materials, please consult the notes at the end of the agenda. Failure to follow the required procedures may result in your materials being excluded from the hearing record; however, failure to timely submit written materials does not preclude a person from testifying before the Board.***

INTRODUCTORY ITEMS

1. **Roll Call.**
2. **Order of Agenda.** Note that the agenda items are numbered for identification purposes only and may not necessarily be considered in this order.
3. **Approval of draft meeting minutes for the September 14, 2012, and October 4-5, 2012 Board meetings.** [Ronji Moffett, (213) 576-6612]

4. **Board Member Communications.**
 - 4.a. Ex Parte Disclosure. Board Members will identify any discussions they may have had requiring disclosure pursuant to Government Code section 11430.40.
 - 4.b. Board Member Reports. The Board Members may discuss communications, correspondence, or other items of general interest relating to matters within the Board's jurisdiction.
5. **Update from State Board.** [Fran Spivy-Weber, (916) 341-5607]

UNCONTESTED ACTION ITEMS

(Items marked with an asterisk are expected to be routine and noncontroversial. The Board will be asked to approve these items at one time without discussion. Any Board member or person may request that an item be removed from the uncontested calendar. Items removed from the Consent calendar will be heard at a future meeting.)

Waste Discharge Requirements that Serve as NPDES Permits Amendment-

- *6. Consideration of tentative amendment to the Waste Discharge Requirements for TFX Aviation, Inc. (Former Terlair Site), Newbury Park; NPDES No. CA0064599. (Comment submittal deadline was September 27, 2012) [Rosario Aston, (213) 576-6653]

Amendment and Time Schedule Order-

- *7. Consideration of tentative amendment to the Waste Discharge Requirements and tentative Time Schedule Order for Donald T. Sterling Corporation (Sterling Ambassador Towers) Los Angeles; NPDES No. CA0053091 (Comment submittal deadline was October 4, 2012) [Rosario Aston, (213) 576-6653]

7.1 Waste Discharge Requirements

7.2 Time Schedule Order

Non-NPDES Waste Discharge Requirements

Revision-

- *8. Montebello Land and Water Inert Waste Landfill, Montebello; Order No. 97-066, File No. 70-029. (Comment submittal deadline was September 18, 2012) [Enrique Casas, (213) 620-2299]

CONTESTED ACTION ITEMS

NPDES Permit for Municipal Separate Storm Sewer System (MS4) Discharges within the Coastal Watersheds of Los Angeles County, with the exception of discharges originating from the City of Long Beach

Renewal-

9. Continuation of public hearing for consideration of the revised tentative National Pollutant Discharge Elimination System (NPDES) Permit for Municipal Separate Storm Sewer System (MS4) discharges within the Coastal Watersheds of Los Angeles County, with the exception of discharges originating from the City of Long Beach, NPDES No. CAS004001 (Revised Tentative Order). No new written materials may be submitted. Parties and interested persons will have the opportunity to address the Regional Board

on the Revised Tentative Order as provided in the Notice of Opportunity for Public Comment and Notice of Adoption Meeting dated October 18, 2012. The Board will accept oral comments only with respect to the revisions made since June 6, 2012, as reflected in track changes format in the Revised Tentative Order circulated on October 18, 2012. The Regional Board may adopt, modify, or deny the Revised Tentative Order, or continue the hearing to a later Board meeting. (*Written comments were due by noon on July 23, 2012.*) [Ivar Ridgeway, (213) 620-2150]

CLOSED SESSION

10. As authorized by Government Code section 11126, the Regional Board will be meeting in closed session. Closed session items are not open to the public. Items the Board may discuss include the following: [Jennifer Fordyce (JF) (916) 324-6682; Frances McChesney (FM), (916) 341-5174; Nicole Johnson (NJ) (916) 322-4142]
 - 10.1 *State Department of Finance, State Water Resources Control Board and Los Angeles Regional Water Quality Control Board v. Commission on State Mandates*, Los Angeles County Superior Court Case No. BS130730. [Challenging the Commission's decision that portions of the LA MS4 permit created unfunded state mandates]. (JF)
 - 10.2 *In re: Halaco Engineering Company*, United States Bankruptcy Court Central District of California, Northern Division, No. ND-02-1255 RR [Regarding a CDO and CAO at the Oxnard Property]. (JF)
 - 10.3 *In re: Los Angeles Region Water Permit – Ventura County*, Commission on State Mandate Test Claim No. 110-TC-01 [Regarding a test claim filed by Ventura County Watershed Protection District and the County of Ventura alleging that portions of Order No. R4-2010-0108 created an unfunded state mandate]. (JF)
 - 10.4 *In re: Petition of City of Redondo Beach for Review of Administrative Civil Liability Order No. R4-2008-0058-M, SWRCB/OCC File A-2124* [Challenging assessment of mandatory minimum penalties for violations of Order Nos. 99-057 and R4-2005-0016]. (FM)
 - 10.5 *In re: Petition of Signal Hill, Downey, et al, for Review of Order No. R4-2009-0130, SWRCB/OCC File A-2071* [Challenging the incorporation into the MS4 Permit of the Waste Load Allocations from the Los Angeles River Watershed Trash TMDL.] (JF)
 - 10.6 *In re: Kinder Morgan, Inc., Chevron Corp., et al for Review of Revised Cleanup and Abatement Order No. R4-2008-0006, SWRCB/OCC File A-2085* [Challenging the revised cleanup goals in the order]. (FM)
 - 10.7 *In re: Upper Santa Clara River Chloride Total Maximum Daily Load Requirements Imposed by the Los Angeles Regional Water Quality Control Board in Resolution R40-2008-0012*. Commission on State Mandates Test Claim No. 10-TC-09 [Regarding a test claim filed by the Santa Clarita Valley Sanitation District of Los Angeles County alleging that portions of Resolution R4-2008-0012 created an unfunded state mandate]. (JF)
 - 10.8 *Joan C. Lavine v. State Water Resources Control Board and Los Angeles Regional Board*, Los Angeles County Superior Court Case No. BS128989 [Challenging the Basin Plan Amendment prohibiting on-site wastewater disposal systems in the Malibu Civic Center area]. (FM)
 - 10.9 *Charles Conway et al. v. State Water Resources Control Board and Los Angeles Regional Water Quality Control Board*, Ventura County Superior Court Case No.

- 56-2011-00399391-CU-WM-VTA [Challenging the McGrath Lake TMDL for polychlorinated biphenyls (PCBs), pesticides, and sediment toxicity]. (JF)
- 10.10 *In re: Petition of Santa Monica Baykeeper and Heal the Bay, SWRCB/OCC File A-2175* [Challenging the Memorandum of Understanding between the City of Malibu, the Los Angeles Regional Board, and the State Water Resources Control Board regarding phased implementation of the Basin Plan amendment prohibiting on-site wastewater disposal systems in the Malibu Civic Center area]. (FM)
- 10.11 *Green Acres, LLC v. Los Angeles regional Water Quality Control Board and State Water Resources Control Board*, Los Angeles County Superior Court Case No. BS138872 [Challenging the Basin Plan Amendment prohibiting on-site wastewater disposal systems in the Malibu Civic Center area]. (FM)
- 10.12 *Valeator, Inc. et al. v. Los Angeles Regional Water Quality Control Board*, Los Angeles County Superior Court Case No. BS138361 [Challenging Cleanup and Abatement Order No. R4-2011-0183 and associated Notice of Violation] (NJ)
- 10.13 Consultation with counsel about:
- (a) A judicial or administrative adjudicatory proceeding that has been formally initiated to which the Regional Board is a party;
 - (b) A matter that, based on existing facts and circumstances, presents significant exposure to litigation against the Regional Board; or
 - (c) A matter which, based on existing facts and circumstances, the Regional Board is deciding whether to initiate litigation. (JF/FM/NJ)
- 10.14 Consideration of the appointment, employment, or evaluation of performance about a public employee. (JF/FM/NJ)
11. **Adjournment of current meeting.** The next regular meeting of the Board will be held on December 6, 2012 at City of Simi Valley Council Chambers, 2929 Tapo Canyon Road, Simi Valley, CA 93063.

**

Ex Parte Communications: An ex parte communication is a communication to a board member from any person, about a pending matter, that occurs in the absence of other parties and without notice and opportunity for them to respond. The California Government Code prohibits the board members from engaging in ex parte communications during permitting, enforcement, and other “quasi-adjudicatory” matters. The Regional Board discourages ex parte communications during rulemaking and other “quasi-legislative” proceedings. The ex parte rules are intended to provide fairness, and to ensure that the board’s decisions are transparent, based on the evidence in the administrative record, and that evidence is used only if stakeholders have had the opportunity to hear and respond to it. Ex parte rules do not prevent anyone from providing information to the water boards or requesting that the water boards take a particular action. They simply require that the information come into the record through proper channels during a duly noticed, public meeting. A board member who has engaged or been engaged in a prohibited ex parte communication will be required to publicly disclose the communication on the record and may be disqualified from participating in the proceeding. For more information, please look at the ex parte questions and answers document found at www.waterboards.ca.gov/laws_regulations/docs/exparte.pdf

Procedures: The Regional Board follows procedures established by the State Water Resources Control Board. These procedures are established in regulations commencing with

section 647 of title 23 of the California Code of Regulations. The Chair may establish specific procedures for each item, and consistent with section 648, subdivision (d) of title 23 of the California Code of Regulations may waive nonstatutory provisions of the regulations. Generally, all witnesses testifying before the Regional Board must affirm the truth of their testimony and are subject to questioning by the Board Members. The Board does not, generally, require the designation of parties, the prior identification of witnesses, or the cross examination of witnesses. Generally, speakers are allowed three minutes for comments. Any requests for an alternate hearing process, such as requesting additional time to make a presentation, should be made to the Executive Officer in advance of the meeting, and under no circumstances later than 5:00 p.m. on the Thursday preceding the Board meeting. The provisions of this paragraph shall be deemed superseded to the extent that they are contradicted by a hearing notice specific to a particular agenda item.

Written Submissions: Written materials (whether hand-delivered, mailed, e-mailed, or facsimiled) **must be received prior to the relevant deadline** established in the agenda and public notice for an item. If the submitted material is more than 10 pages or contains foldouts, color graphics, maps, or similar items, 12 copies must be submitted prior to the relevant deadline.

Failure to comply with requirements for written submissions is grounds for the Chair to refuse to admit the proposed written comment or exhibit into evidence. (Cal. Code Regs. tit. 23, § 648.4(e).) The Chair may refuse to admit written testimony into evidence unless the proponent can demonstrate why he or she was unable to submit the material on time or that compliance with the deadline would otherwise create a hardship. In an adjudicatory matter, where there is a showing of prejudice to any party or the Board from admission of the written testimony, the Chair may refuse to admit it.

Administrative Record: Material presented to the Board as part of testimony that is to be made part of the record must be left with the Board. This includes photographs, slides, charts, diagrams, etc. All Board files pertaining to the items on this Agenda are hereby made a part of the record submitted to the Regional Board by staff for its consideration prior to action on the related items.

Accessibility: Individuals requiring special accommodations or language needs should contact Dolores Renick at (213) 576-6629 or drenick@waterboards.ca.gov at least ten working days prior to the meeting. TTY/TDD Speech-to-Speech users may dial 7-1-1 for the California Relay Service.

Availability of Complete Agenda Package: A copy of the complete agenda package is available for examination at the Regional Board Office during regular working hours (8:00 a.m. to 5:00 p.m. Monday through Friday) beginning 10 days before the Board meeting. Questions about specific items on the agenda should be directed to the staff person whose name is listed with the item.

Continuance of Items: The Board will endeavor to consider all matters listed on this agenda. However, time may not allow the Board to hear all matters listed. Matters not heard at this meeting may be carried over to the next Board meeting or to a future Board meeting. Parties will be notified in writing of the rescheduling of their item. Please contact the Regional Board staff to find out about rescheduled items.

Challenging Regional Board Actions: Pursuant to Water Code section 13320, any aggrieved person may file a petition to seek review by the State Water Resources Control Board of most actions taken by the Regional Board. A petition must be filed within 30 days of the action. Petitions must be sent to State Water Resources Control Board, Office of Chief Counsel; ATTN: Phil Wyels, Assistant Chief Counsel; 1001 "I" Street, 22nd Floor; Sacramento, CA 95814.

LYRIS MAILING

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DATE MAILED:

10-31-12

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7/20/2010 16:08 jdettle@TorranceCA.gov	John Dettle
7/6/2009 13:43 jdettle@torrnet.com	John Dettle
11/10/2009 14:01 jdougall@lvmwd.com	Jan Dougall
11/6/2010 10:46 jergeorge@hotmail.com	Jeremiah George
5/9/2012 15:23 jerri.sumlin@sekisui-spr.com	Jerri Sumlin
6/7/2012 9:32 jford@clwa.org	Jeff Ford
5/11/2010 10:09 jfordyce@waterboards.ca.gov	Jennifer Fordyce

6/7/2011 20:38 jfries@counsel.lacounty.gov	Judith Fries
6/15/2011 17:04 jholtz@quinncompany.com	James Holtz
7/6/2009 13:51 jhunter@jlha.net	John L. Hunter
4/20/2010 15:56 jkaur@ch2m.com	Jagjit Kaur
6/6/2012 14:41 jkelly@wheelerandgray.com	John Kelly
10/28/2011 13:54 jlivesey@dpw.lacounty.gov	Yaneth Livesey
1/20/2010 8:49 jnelson@cc-eng.com	Joshua Nelson
7/20/2009 16:47 jnewman@waterboards.ca.gov	Jenny Newman
9/9/2009 11:20 jnfireball@yahoo.com	Jane E. Nelson
12/29/2011 9:48 joanne.golden@laedc.org	JoAnne Golden
6/9/2011 10:17 john.dang@pccrusa.com	JOHN DANG
12/15/2009 10:59 john.r.madden@usace.army.mil	John Madden
7/6/2009 13:06 jorger@ci.commerce.ca.us	Jorge Rifa
7/6/2009 13:03 joropeza@bellgardens.org	John Oropeza
11/16/2011 8:41 joskoui@downeyca.org	John Oskoui
7/6/2009 13:06 jparker@ci.claremont.ca.us	Jeff Parker
3/15/2012 17:00 jpereira@cwecorp.com	Jason Pereira
7/6/2009 13:38 jranells@ci.la-verne.ca.us	J. R. Ranells
8/22/2011 11:54 jsayre@brwnald.com	Jaime Sayre
7/20/2011 10:09 jsowinsk@dpw.lacounty.gov	Jolanta Sowinska
7/6/2009 13:56 jstock@bellflower.org	Jerry Stock
5/6/2010 8:17 jsvensson@dpw.lacounty.gov	Josh Svensson
8/7/2012 15:56 jthorsen@malibucity.org	Jim Thorsen
3/5/2012 15:02 jtorres@ci.vernon.ca.us	Jerrick Torres
6/20/2012 10:37 jtruhan@mw2h.com	Joyce Clark
7/4/2012 13:20 justin.dutmiers@honeywell.com	Justin Dutmers
7/6/2009 13:18 jvalentine@cityofpasadena.net	Jim Valentine
7/6/2009 13:07 jwayt@elsegundo.org	Jack Wayt
3/9/2012 13:00 jweiner.venturacoastkeeper@wishtoyo.org	Jason Weiner
10/24/2011 15:38 jwen@downeyca.org	Jason Wen
11/11/2010 10:47 jwilliams@marchem.net	Jeffrey Williams
11/11/2011 16:23 kamara.sams@boeing.com	Kamara Sams
6/21/2010 10:10 karenc@lwa.com	Karen Cowan
2/17/2012 11:53 katharine.moore@sen.ca.gov	Katharine Moore
1/17/2012 11:02 katherine.paris@tetrattech.com	Katherine Paris
7/6/2009 13:20 kathleen.enve@verizon.net	Kathleen McGowan
2/22/2012 16:20 kaying_lee@ci.pomona.ca.us	Kaying Lee
7/19/2012 8:24 kbreyer@santa-clarita.com	Kerry Breyer
3/10/2011 10:39 kemmerer.john@epa.gov	John Kemmerer
1/5/2011 14:32 kens@sccwrp.org	Ken Schiff
5/6/2011 8:10 kevarts@rbf.com	Kevin Evarts
11/16/2011 9:00 kevin@kjservices.net	Kevin Sales
7/6/2009 13:22 kfarfsing@cityofsignalhill.org	Kenneth C. Farfsing
11/9/2010 15:31 kfisher@ci.agoura-hills.ca.us	Kelly Fisher
9/17/2012 10:32 khaim.morton@sen.ca.gov	Khaim Morton
7/6/2009 13:03 kimberlycolbert@caaprofessionals.com	Kimberly Colbert
11/7/2011 14:06 kirk.c.brus@usace.army.mil	Kirk Charles Brus

10/4/2010 9:18	kjames@healthebay.org	Kirsten James
10/17/2011 16:22	kkunysz@mwdh2o.com	Kathy Kunysz
9/6/2010 13:03	klamorie@charter.net	Kim Lamorie
12/22/2011 16:15	klinker@anaheim.net	Keith Linker
8/23/2010 11:36	kmattfeld@portla.org	Kenneth Mattfeld
8/6/2009 9:54	kmoore@sunstarlabs.com	Kevin Moore
6/5/2012 14:16	kosta.kaporis@lacity.org	Kosta Kaporis
7/6/2009 13:36	kpatel@ci.san-dimas.ca.us	Krishna Patel
7/6/2009 13:21	kpulskamp@santa-clarita.com	Kenneth R. Pulskamp
2/2/2010 9:23	kristy.allen@tetrattech.com	Kristy Allen
11/10/2010 11:39	kristy@lasgrwc.org	Kristy Morris
4/5/2010 11:48	kruffell@lacsds.org	Kristen Ruffell
11/9/2010 16:32	kstpeters@earthconsultants.com	Kay St. Peters
7/6/2009 13:09	ktam@ci.irwindale.ca.us	Kwok Tam
7/6/2009 13:40	kvivanti@lakewoodcity.org	Konya Vivanti
11/9/2010 15:50	kwang@waterboards.ca.gov	Kenny Wang
7/6/2009 13:52	kwatson@cityofinglewood.org	Ken Watson
7/6/2009 13:38	kwilson@ci.vernon.ca.us	Samuel Kevin Wilson
7/6/2009 13:40	lamimoto@cityofinglewood.org	Lauren Amimoto
7/29/2010 9:03	langford.book@ladwp.com	Langford Book
8/24/2011 15:36	laral@usgvmwd.org	Lara L. Larramendi
12/8/2009 11:15	larry.richards@legrand.us	Larry Richards
3/25/2012 16:12	laustin@geosyntec.com	Lisa Austin
7/6/2009 13:18	lbenedetti@paramountcity.com	Linda Benedetti-Leal
7/19/2012 9:46	lcyrus@ci.san-dimas.ca.us	Latoya Cyrus
9/9/2009 9:15	ldods@counsel.lacounty.gov	Lauren E. Dods
11/9/2010 17:11	leo.raab@wecklabs.com	Leo Raab
11/7/2011 16:42	leverett@clwa.org	Lauren Everett
7/31/2009 16:20	lfeldman@localgovlaw.com	Lauren Feldman
11/6/2011 11:56	lilykaye@hotmail.com	Lily Kaye
6/28/2010 13:58	liz@smbaykeeper.org	Liz Crosson
7/6/2009 13:23	ljackson@torrnet.com	LeRoy Jackson
7/6/2009 13:20	lleblanc@cityofrosemead.org	Lou LeBlanc
4/19/2010 9:55	llough@bbinfrastructureinc.com	Lynn Lough
11/28/2010 20:36	lmckenney@sawpa.org	Larry McKenney
8/14/2012 11:35	lnaslund@dpw.lacounty.gov	Lisa Naslund
11/22/2010 12:05	lopezj@chevron.com	Joseph E. Lopez
4/21/2011 12:47	loriwolfe@wolfe-engineering.com	Lori Wolfe
7/6/2009 13:36	lpyeatt@comptoncity.org	Leslie Alan Pyeatt
8/15/2011 13:11	lreyes@lakewoodcity.org	Leon de los Reyes
8/22/2011 10:40	lskutecki@brwncaid.com	Lisa Skutecki
4/5/2010 13:00	ltsoi@lacsds.org	Linda Tsoi
3/5/2012 14:15	luke.milick@lacity.org	Luke Milick
9/16/2009 9:53	mackw@lwa.com	Malcolm Walker
7/6/2009 13:39	malexander@lcf.ca.gov	Mark R. Alexander
11/1/2011 15:24	mali@waterboards.ca.gov	Mazhar Ali
2/14/2012 16:27	marcbeyeler@mac.com	marc Beyeler

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7/6/2009 13:11 mark-christoffels@longbeach.gov	Mark Christoffels
9/14/2010 10:01 markbaker@physislabs.com	Mark D. Baker
2/15/2011 13:45 martin.pastucha@smgov.net	Martin Pastucha
11/9/2010 15:47 martinagarnier@gmail.com	Martin Garnier
5/23/2012 7:38 matt.helon@sierrachemsales.com	Matt Helon
2/8/2011 14:00 matzrubber@sbcglobal.net	Phillip Jensen
8/7/2010 22:02 maya@cbeval.org	Maya Golden-Krasner
12/27/2011 16:30 mayorlutz@gmail.com	Mary Ann Lutz
12/11/2009 11:51 mbiedeback@sespeconsulting.com	mike biedeback
11/2/2011 10:36 mcarpenter@newhall.com	Matt Carpenter
7/6/2009 13:00 mdadian@cityofartesia.us	Maria Dadian
7/6/2009 13:45 mduran@ci.gardena.ca.us	Mike Duran
1/4/2011 13:31 meeker.lara@gmail.com	Lara Meeker
11/16/2011 7:52 meg_mcwade@ci.pomona.ca.us	Meg McWade
2/21/2012 11:12 melissa.pamer@dailynews.com	Melissa Pamer
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11/5/2009 6:46 metalkittiekat@aol.com	Nicole Bullum
11/7/2011 14:56 mfrancis@ddsffirm.com	Michael A. Francis
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2/16/2012 14:41 mgrey@biasc.org	Mark Grey
7/1/2010 14:57 michael.blum@gmail.com	Michael Blum
6/27/2012 9:47 michele_turton@baxter.com	
3/16/2012 0:41 miguel@urbansemillas.com	Miguel Luna
7/6/2009 13:36 mike.shay@redondo.org	Mike Shay
7/3/2012 21:39 mike@watershedhealth.org	Mike Antos
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6/2/2011 17:09 mitch@whitsoncm.com	Mitch Whitson
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4/12/2011 13:43 mkadah@edmsvc.com	Michel Kadah
4/28/2011 10:03 mkearney@waterboards.ca.gov	Michelle Kearney
7/6/2009 13:04 mkeith@cityofbradbury.org	Michelle Keith
3/9/2010 9:38 mkinsler@wheelerandgray.com	Mary Kinsler
11/10/2011 10:26 mkirrene@verizon.net	Michael Kirrene
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7/6/2009 13:08 mlansdell@ci.gardena.ca.us	Mitchell G. Lansdell
4/13/2012 15:01 mlcoffee@nossaman.com	Mary Lynn K. Coffee
9/26/2012 11:15 mmcmeechan@environcorp.com	Melissa McMeechan
7/6/2009 13:47 mmilhiser@cityoflamirada.org	Mike Milhiser
11/16/2011 8:00 mmostahkami@sogate.org	Mohammad Mostahkami
9/11/2012 15:52 mmotto@geosyntec.com	Megan Otto
7/6/2009 13:58 mmunoz@cityoflamirada.org	Marlin Munoz
11/16/2011 7:57 mogrady@cerritos.us	Mike OGrady
7/6/2009 13:47 moillataguerre@ci.glendale.ca.us	Maurice Oillataguerre
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3/9/2010 9:28 nascarjws@yahoo.com	John Schwartz
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5/20/2010 7:53 navedissian@quakercityplating.com	NICK AVEDISSIAN
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8/6/2009 11:06 ngarrison@nrdc.org	Noah Garrison
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8/13/2012 19:24 njohnson@waterboards.ca.gov	Nicole Johnson
8/7/2012 15:02 nmartorano@waterboards.ca.gov	Nicholas Martorano
7/6/2009 13:43 ocramer@santa-clarita.com	Oliver Cramer
10/28/2011 14:52 ogalang@brwncald.com	Oliver D. Galang PE
11/9/2010 15:30 ogalang@dpw.lacounty.gov	Oliver Galang
8/3/2009 12:35 olivia@malibutimes.com	Olivia Damavandi
8/9/2010 10:52 paul.ahn@sce.com	Paul ahn
7/17/2009 15:05 paul.singarella@lw.com	Paul Singarella
5/4/2012 15:16 pauling.sun@tetrattech.com	Pauling Sun
1/12/2010 8:06 pcmsusa@hotmail.com	Raymond Wells PhD
7/6/2009 13:41 pelkins@carson.ca.us	Patricia Elkins
5/17/2012 15:48 pete_halpin@caltestlabs.com	Peter Halpin
9/16/2011 9:48 ply@wrđ.org	Phuong Ly
2/27/2010 15:59 pmglick@gmail.com	Peter Glick
10/12/2010 14:27 quangtran59@gmail.com	Quang Tran
4/1/2011 14:18 r.appy@cox.net	Ralph Appy
9/23/2010 7:17 rabbott5@toromail.csudh.edu	Rodney Abbott
2/1/2011 11:42 rasancho@dpw.lacounty.gov	Randall Sancho
7/4/2012 11:03 razzip1@aol.com	Paul V. Ferrazzi
11/16/2011 9:01 rbeste@torranceca.gov	Rob Beste
7/6/2009 13:17 rbow@ci.monrovia.ca.us	Ron Bow
2/17/2012 9:50 rchristmann@waterboards.ca.gov	Rebecca Christmann
7/6/2009 13:22 rdickey@sogate.org	Robert T. Dickey
12/28/2011 16:43 rdrayse@treepeople.org	Rebecca Drayse
8/15/2011 13:46 reddy.pakala@ventura.org	Reddy Pakala
9/16/2009 14:00 rehsiteworks@aol.com	Ray E. Hensley
7/6/2009 13:42 rfajardo@elsegundo.org	Ron Fajardo
8/24/2009 9:40 rfreeman@lawa.org	Robert Freeman
7/2/2010 12:04 rfwpetro@verizon.net	Darry White
7/6/2009 13:17 rhaley@lynwood.ca.us	Roger Haley

3/10/2011 9:37 rhs@malibufamilywines.com	Ronald H. Semler
2/16/2011 11:54 ricardo.moreno@sce.com	Ricardo E. Moreno
2/12/2010 15:00 ricardo.moreno@ventura.org	Ricardo Moreno
11/25/2011 12:08 richard@coloramanursery.com	Richard Wilson
11/16/2011 8:54 rick.valte@smgov.net	Rick Valte
7/6/2009 13:48 rkenny@soelmonte.org	Ron Kenny
10/3/2012 15:30 rmcpherson@portla.org	Rachel McPherson
11/9/2011 16:38 rmontevideo@rutan.com	Richard Montevideo
10/27/2011 12:53 rnewman@santa-clarita.com	Robert Newman
5/10/2010 17:08 robert.ruscitto@arcadis-us.com	Robert Ruscitto
8/2/2010 9:32 robert.skands@pardeehomes.com	Robert Skands
11/28/2011 15:36 robert@ssseeds.com	Robert Sjoquist
7/6/2009 13:41 robertz@ci.commerce.ca.us	Robert Zarrilli
2/10/2011 16:44 roly@kal-plastics.com	Rolly A. Panganiban
11/16/2011 7:16 rond@rpv.com	Ron Dragoo, P.E.
11/9/2010 15:42 rorton@lvmwd.com	Randal D. Orton Ph.D. D.Env.
10/30/2012 12:51 rpiamonte@dpw.lacounty.gov	Rafael Piamonte
2/1/2011 8:56 rpurdy@waterboards.ca.gov	Renee Purdy
7/6/2009 13:20 rruiz@sfcity.org	Ron Ruiz
7/6/2009 13:53 rsalas@lapuente.org	Rene Salas
10/28/2009 14:20 rsoto@ci.vernon.ca.us	Rafael Soto
7/6/2009 13:49 rtahir@tecsenv.com	Ray Tahir
3/4/2011 13:50 rtremblay@lacs.d.org	Raymond L Tremblay
7/6/2009 13:53 rvasquez@scsengineers.com	Ralph Vasquez
4/14/2010 11:46 rveiga@waterboards.ca.gov	Rebecca Veiga Nascimento
3/23/2011 11:22 rwang@dpw.lacounty.gov	Ruby Wang
4/8/2011 13:18 rwatson@rwaplanning.com	Richard A. Watson
8/6/2009 16:44 rwellington@willdan.com	Ray Wellington
7/6/2009 13:23 rwishner@ci.walnut.ca.us	Rob Wishner
2/15/2011 10:36 s.guldimann@gmail.com	Suzanne Guldimann
7/6/2009 13:49 sam.gutierrez@westcovina.org	Sam Gutierrez
7/6/2009 13:20 samw@ci.rolling-hills-estates.ca.us	Samuel R. Wise
6/15/2012 13:49 sandym@lwa.com	Sandy Mathews
7/6/2009 13:52 sarinamoraleschoate@santafesprings.org	Sarina Morales-Choate
8/3/2009 6:17 sbarankiewicz@ohslegal.com	Stan M. Barankiewicz II
8/3/2009 10:47 scheng@sgch.org	Angela Cheng
12/13/2011 11:08 sean.j.dunn@damco.com	Sean Dunn
5/3/2010 17:44 selimeren@gmail.com	SELIM EREN
11/9/2010 15:56 seth.carr@lacity.org	seth carr
6/7/2012 10:43 sfleischli@nrdc.org	Steve Fleischli
7/6/2009 13:43 sfurukawa@ci.south-pasadena.ca.us	Shin Furukawa
7/6/2009 13:25 sgrund@lacs.d.org	Shannon Grund
7/6/2009 13:11 shahram.kharaghani@lacity.org	Shahram Kharaghani
2/21/2012 8:50 shawn.hagerty@bbklaw.com	Shawn Hagerty
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2/23/2011 10:55 smartin@remet.com	Scott Martin
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11/16/2011 8:01 smyrter@cityofsignalhill.org	Steve Myrter
2/2/2011 14:43 snania@forester.net	
9/10/2009 15:31 snissman@bos.lacounty.gov	Susan Nissman
7/6/2009 13:46 sochoa@ci.monrovia.ca.us	Scott Ochoa
5/11/2012 14:33 soligeorge@chevron.com	Soli George
6/6/2012 16:51 sperlstein@weho.org	Sharon Perlstein
11/15/2011 15:20 srigg@ci.vernon.ca.us	Scott Rigg
5/31/2011 16:28 ssanchez@bialav.org	Sandy Sanchez
1/30/2012 13:55 ssantilena@healthebay.org	Susie Santilena
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11/16/2011 8:59 steve.huang@redondo.org	Steve Huang
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6/19/2012 17:02 sturney@weho.org	Susannah Turney
5/31/2011 16:33 suhles@delanegroup.com	Scott Uhles
5/27/2012 12:38 suzi_youssef@ymail.com	Suzi Youssef
11/16/2011 8:46 swalker@cityofpasadena.net	Stephen Walker
5/27/2010 11:33 symeon.finch@orco.com	Symeon Finch
7/6/2009 13:08 szurn@ci.glendale.ca.us	Stephen M. Zurn
11/10/2011 9:40 tajenkins@sgvwater.com	Thomas A. Jenkins
6/8/2012 15:29 tattnlaw@gmail.com	JOHNTOMMY ROSAS
7/6/2009 13:04 tcoroalles@cityofcalabasas.com	Anthony Coroalles
7/31/2009 15:57 tford@smbaykeeper.org	Tom Ford
2/23/2012 8:33 tiffanyshedrick@santafesprings.org	Tiffany Shedrick
5/31/2011 16:30 tom.mitchell@pardeehomes.com	Tom Mitchell
12/15/2009 10:51 tony.barboza@latimes.com	Tony Barboza
3/23/2010 11:19 tony.pepe@csun.edu	Tony Pepe
9/16/2010 10:20 tony@csstudios.com	Tony Ignacio
2/20/2012 13:01 tracy@egoscuelaw.com	Tracy Egoscue
7/6/2009 13:10 trobinson@cityoflamirada.org	Tom E. Robinson
7/6/2009 11:29 trodgers@waterboards.ca.gov	Theresa Rodgers
11/14/2011 8:33 tsmith@bonterraconsulting.com	Thomas Smith
7/6/2009 12:59 ttait@ci.arcadia.ca.us	Tom Tait
7/6/2009 13:22 tybarra@soelmonte.org	Tony Ybarra
4/3/2011 19:01 uhden@metro.net	Roger Uhden
6/17/2011 20:16 uyeda@pbworld.com	Pamela Uyeda
7/6/2009 13:42 vcastro@ci.covina.ca.us	Vivian Castro
4/11/2011 13:02 vcastro@covinaca.gov	Vivian Castro
1/24/2011 11:30 vhevener@ci.arcadia.ca.us	Vanessa Hevener
11/7/2011 11:10 victor.kennedy@cshs.org	Victor Kennedy
11/16/2011 8:39 vpeterson@malibucity.org	Vic Peterson
10/28/2010 12:38 vsalazar@ldcla.com	Victor Salazar PE
7/6/2009 13:03 vsinghal@baldwinpark.com	Vijay Singhal
2/18/2011 11:31 wade@grahamstudio.net	Wade Graham

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6/29/2011 9:59 wcaffrey@vandermostconsulting.com
12/29/2011 11:17 welchrc@pbworld.com
11/14/2011 16:14 wgross@lacs.org
8/6/2012 10:00 wjohnson@dpw.lacounty.gov
7/6/2009 13:52 wrlindinc@aol.com
8/17/2011 11:33 wynesta@earthlink.net
11/16/2011 8:58 ykwan@lcf.ca.gov
7/6/2009 13:35 ys@cityofrh.net
12/6/2010 17:34 ysim@dpw.lacounty.gov
9/17/2010 8:45 zora.baharians@lacity.org

Wentzelee Botha
wade caffrey
Robert Welch
bill gross
William Johnson
Wes Lind
Wynesta Dale
Ying Kwan
Yolanta Schwartz
Youn Sim
Zora

Fordyce, Jennifer@Waterboards

From: Ray Tahir <rtahir@tecsenv.com>
Sent: Friday, October 12, 2012 5:01 PM
To: Unger, Samuel@Waterboards; Ridgeway, Ivar@Waterboards
Cc: mglickfeld@waterboards.ca.gov; mmehranian@waterboards.ca.gov;
cstringer@waterboards.ca.gov; mcamacho@waterboards.ca.gov;
imuno@waterboards.ca.gov; fdiamond@waterboards.ca.gov;
lyee@waterboards.ca.gov
Subject: November 8th Public Hearing

Gentlemen,

Please ask the Board Chair if she could set aside for me 48 minutes at the November 8th public hearing. I will be presenting on behalf the following cities:

1. Baldwin Park
2. Claremont
3. Duarte
4. Irwindale
5. Lawndale
6. Lomita
7. Carson
8. Pico Rivera
9. Compton
10. South El Monte
11. El Monte
12. West Covina
13. San Fernando
14. San Dimas
15. Gardena
16. Glendora

I will notify the LASP group that my cities have requested the time.

Secondly, will the public hearing on November 8th be an adjudicative proceeding?

Thanks,

Ray Tahir
626.396.9424

Fordyce, Jennifer@Waterboards

From: Richard Watson <rwatson@rwaplanning.com>
Sent: Monday, October 29, 2012 10:26 AM
To: Ridgeway, Ivar@Waterboards
Cc: Kenneth Farfsing
Subject: Block of Time Request

Ivar:

On behalf of the City of Signal Hill, I would like to request a 20-minute block of time during the November 8th hearing to comment on the Revised Tentative Order for the NDDES permit for MS4 discharges within the coastal watersheds of Los Angeles County.

Rich

Richard Watson

Richard Watson & Associates, Inc.
Development Services. Stormwater Quality. Strategic Planning.
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Fordyce, Jennifer@Waterboards

From: Donna Toy Chen <donna.chen@lacity.org>
Sent: Tuesday, October 30, 2012 1:58 PM
To: Ridgeway, Ivar@Waterboards; Purdy, Renee@Waterboards
Cc: Kharaghani, Shahram; Vega, Robert
Subject: Request for Additional Time

Hi Ivar,

City of Los Angeles would like to request 30 minutes testimony time for the November 8 hearing on the MS4 permit. We would very much appreciate your granting us this request.

Thank you.

Donna Chen
Assistant Division Manager
Watershed Protection Division
Bureau of Sanitation
1149 S. Broadway, 10th Floor
Los Angeles, CA 90015
213-485-3928

Fordyce, Jennifer@Waterboards

From: Heather Merenda <HMERENDA@santa-clarita.com>
Sent: Wednesday, October 31, 2012 4:37 PM
To: Purdy, Renee@Waterboards; Ridgeway, Ivar@Waterboards
Subject: Electeds on November 8

Good afternoon and Happy Halloween.

Our City Council Member would like to attend and speak on November 8. Will there be a designated time at the beginning of the meeting for elected officials? Can I respectfully request that electeds be allowed time at the beginning of the meeting?

*Heather Lea Merenda, MPA
LEED Professional, CPSWQ, QSP
Environmental Services Division
661-284-1413*

"When the well runs dry, we know the worth of water"

GreenSantaClarita.com



Fordyce, Jennifer@Waterboards

From: Heather Maloney <hmaloney@ci.monrovia.ca.us>
Sent: Wednesday, October 31, 2012 4:55 PM
To: Ridgeway, Ivar@Waterboards; LAMS42012
Cc: Unger, Samuel@Waterboards; Purdy, Renee@Waterboards; Smith, Deborah@Waterboards; Heather Merenda (hmerenda@santa-clarita.com); John Dettle (jdettle@TorranceCA.Gov); Joe Bellomo (jbellomo@willdan.com)
Subject: 11/8 Hearing Speaking Request
Importance: High


The LA Permit Group would like to request 40 minutes for a presentation at the November 8, 2012 Regional Board Hearing. We plan to utilize a Power Point presentation and will bring copies to the Hearing.

Sincerely,

-Heather

Heather M. Maloney

Senior Management Analyst
City of Monrovia - Department of Public Works - Administration & Environmental Services
600 S. Mountain Ave, Monrovia, CA 91016
☎ 626.932.5577 | 🖨 626.932.5559 | ✉ hmaloney@ci.monrovia.ca.us

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Please take a moment to complete this short survey to tell us about your experience. Your responses will be kept confidential. Click [here](#) to take the survey

Fordyce, Jennifer@Waterboards

From: Mike Shay <Mike.Shay@redondo.org>
Sent: Wednesday, October 31, 2012 7:45 AM
To: Ridgeway, Ivar@Waterboards
Cc: Kathleen McGowan (kathleen.enve@verizon.net); John Dettle (JDettle@TorranceCA.gov); Elaine Jeng
Subject: November 8, 2012 MS4 NPDES Permit Public Hearing

Ivar, the cities of Redondo Beach, Manhattan Beach, Hermosa Beach and Torrance (members of the SMBBB TMDL Jurisdiction Groups 5 & 6) desire to make a joint presentation at the November 8, 2012 hearing. We request you allocate 12 minutes for our presentation. Thank you for your assistances.

Michael Shay

Principal Civil Engineer
City of Redondo Beach
(310) 318-0661 x2455



Fordyce, Jennifer@Waterboards

From: Garrison, Noah <ngarrison@nrdc.org>
Sent: Wednesday, October 31, 2012 6:07 PM
To: Purdy, Renee@Waterboards
Cc: liz@lawwaterkeeper.org; Kirsten James; Fleischli, Steve;
daniel@lawyersforcleanwater.com; Unger, Samuel@Waterboards
Subject: Request for time at Nov 8 LAMS4 hearing

Dear Ms. Purdy,

On behalf of the Natural Resources Defense Council, LA Waterkeeper, and Heal the Bay, we are writing to request one hour for presentation (20 minutes for each organization) at the Nov 8, 2012 Regional Board hearing on the LA MS4 Permit. Please feel free to contact us with any questions you may have,

Sincerely,

Noah Garrison

Fordyce, Jennifer@Waterboards

From: Jennifer Brown <JBrown@malibucity.org>
Sent: Thursday, November 01, 2012 3:11 PM
To: Ridgeway, Ivar@Waterboards
Subject: Request for time on Novemeber 8th- City of Malibu

Hello Ivar,

The City of Malibu would like to reserve 15 minutes for comments and any cross examination at the November 8th Regional Board hearing for the MS4 permit.

Thank you,

Jennifer Brown | Sr. Environmental Programs Coordinator

Environmental Sustainability Department | City of Malibu

 23825 Stuart Ranch Road Malibu, CA 90265

 310.456.2489 ext. 275

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LOS ANGELES, CALIFORNIA 90017
TELEPHONE (213) 688-7715
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WRITER'S DIRECT NUMBER
(213) 629-8787

WRITER'S E-MAIL ADDRESS
hgest@burhennigest.com

November 1, 2012

VIA EMAIL

Mr. Ivar Ridgeway
Los Angeles Regional Water
Quality Control Board
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Re: *Hearing on Tentative Draft Permit for MS4 Discharges within
the Coastal Watersheds of County of Los Angeles: November
8, 2012*

Dear Mr. Ridgeway:

This office represents the County of Los Angeles and the Los Angeles County Flood Control District. The County and the District request one hour in which to make oral comments on the draft tentative order and a presentation at this hearing.

Thank you for your attention to this matter.

Very truly yours,



Howard Gest

HDG:da

Fordyce, Jennifer@Waterboards

From: Mark Grey <mgrey@biasc.org>
Sent: Friday, November 02, 2012 1:32 PM
To: Ridgeway, Ivar@Waterboards
Cc: Unger, Samuel@Waterboards; Purdy, Renee@Waterboards; Holly Schroeder
Subject: Presentation Time Thursday November 8, 2012

Ivar, BIA/SC and CICWQ respectfully request up to 10 minutes for a brief presentation regarding changes made to the Tentative Order during the forthcoming LA County MS4 permit adoption hearing on 11/8/12.

We greatly appreciate the time you afforded us this morning to discuss potential changes and clarifications in the permit language. I will follow up with you on Monday as we discussed. Regards,

Mark Grey, Ph.D.
Director of Environmental Affairs/Technical Director
Building Industry Association of Southern California
Construction Industry Coalition on Water Quality
3891 11th Street
Riverside, CA 92501
(951) 781-7310, x.213 (office)
(909) 525-0623 (cell)



TECS Environmental Compliance Services

106 South Mentor Avenue – 125 • Pasadena, CA 91106 • Tel: 626.396.9424 • Fax: 626.396.1916

October 29, 2012

Mr. Ivar Ridgeway
California Regional Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013
(213) 620-2150

Subject: Tentative MS4 Order Comments

Dear Mr. Ridgeway:

I am pleased to submit the comments contained herein on behalf of my clients¹ in connection with the Revised Order No. R4-2012-XXXX NPDES Permit No. CAS004001. In summary terms, the revised permit adds new language that constitutes a significant change and, therefore, merits a new 45 day review and comment period.

[REDACTED]

I. Revised Order Represents a Significant Change to the Tentative Order

The revised order contains a number of significant changes that should trigger a 45 day review and comment period. The largest change is associated with the Los Angeles County Flood Control District's re-write of certain provisions contained in the initial draft tentative order. These changes include but are not limited to: (1) a section called *Requirements Applicable to the Los Angeles County Flood Control District*; (2) numerous other revisions to the tentative order that extend to almost all of the attachments (definitions, non-stormwater discharges matrix, receiving water limitations matrix, monitoring and reporting matrix, watershed management program matrix, minimum control measures matrix, total maximum daily loads (general) matrix, total maximum loads (specific matrix), and general miscellaneous; and (3) an addition of an enhanced watershed management program.

¹Baldwin Park, Carson, Compton, Claremont, Duarte, El Monte, Gardena, Glendora, Irwindale, Lawndale, Lomita, Pico Rivera, San Gabriel, San Dimas, South El Monte, Pico Rivera, and West Covina.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Beyond this, Regional Board staff has made it difficult in this revised order to determine which changes are new and which ones have been eliminated. The changes appear to be denoted by underlines and strike-outs. There is also no change sheet explaining the revisions, why they were made, and who made them. This has resulted in more confusion that existed prior to the revisions – confusion that Regional Board has done nothing to address.

The lack of review time for the revised permit is unjustifiably short. The revised order and attachments were released on October 23rd, but comments must be submitted by October 29th -- only six days to review and comment. The revised order, in effect, is a significant re-write of the tentative order that requires sufficient time for permittees to review and comment – and more importantly to ask questions of Regional Board staff to obtain clarification. Additional review

time would surely result in more problems with the revised order. Failing to provide not only an explanation of the revised order, but also responding to concerns and issues associated with the pre-revised order would leave many permittees with no choice except to challenge the revised order.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[Redacted]

[Redacted]

Notwithstanding that insufficient review and time has been given, I would like to thank you once again for the opportunity to comment on the revised order. Should you have any questions please call me.

Sincerely,



Ray Tahir



Los Angeles Regional Water Quality Control Board

TO: Parties and Interested Persons *SU*

FROM: Samuel Unger, Executive Officer
LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD

DATE: November 5, 2012

SUBJECT: SECOND REVISED TENTATIVE NPDES PERMIT FOR MS4 DISCHARGES WITHIN THE COASTAL WATERSHEDS OF LOS ANGELES COUNTY, WITH THE EXCEPTION OF DISCHARGES ORIGINATING FROM THE CITY OF LONG BEACH

On October 18, 2012, staff of the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) circulated a revised tentative NPDES Permit for Municipal Separate Storm Sewer System (MS4) discharges within the Coastal Watersheds of Los Angeles County, with the exception of discharges originating from the City of Long Beach, NPDES No. CAS004001 (Revised Tentative Order). The Revised Tentative Order included revisions made to the tentative order released for public comment on June 6, 2012 and was the result of written and oral comments received by the Los Angeles Water Board, including oral comments made during the public hearing held on October 4-5, 2012. The revisions in the Revised Tentative Order were made in track changes format to assist the public in identifying the revisions.

Since circulating the Revised Tentative Order on October 18, 2012, Los Angeles Water Board staff has continued to meet with permittees and interested persons to discuss the Revised Tentative Order. As a result of these discussions, Board staff is hereby circulating a Second Revised Tentative Order that includes proposed additional changes to the Revised Tentative Order for the Los Angeles Water Board's consideration on November 8, 2012. The Second Revised Tentative Order also includes additional changes to provide greater clarification, ensure consistency throughout the permit, and to correct inadvertent omissions and/or typographical or grammatical errors. To assist the Board and the public in identifying these changes, the additional changes in the Second Revised Tentative Order are reflected in track changes format on a "clean"¹ version of the Revised Tentative Order circulated on October 18, 2012.

The Second Revised Tentative Order is posted on the Board's web site at:
http://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/index.shtml

Please direct any communications and/or questions regarding this matter to Ms. Renee Purdy, Chief of the Regional Programs Section, at (213) 576-6622 or rpurdy@waterboards.ca.gov.

¹ For ease of reference, all track changes reflected in the Revised Tentative Order on October 18, 2012 have been accepted. The new additional changes have been inserted in the Revised Tentative Order, which are reflected in track changes format. Thus, the changes reflected in track changes format in the Second Revised Tentative Order are changes made since October 18, 2012.

LYRIS MAILING

RB-AR20427

LIST NAME:

LA MSY

DATE MAILED:

11-5-12

DATE JOINED	EMAIL ADDR	DATE MAILED	FULL NAME
2/2/2011 12:04	ADRIEN236@VLPRODUCE.COM		ADRIEN F. MADDALENO
6/22/2010 11:57	AEMiller@waterboards.ca.gov		Alan E. Miller
3/27/2012 13:25	Berry.Ueoka@EverestConsultants.com		Berry Ueoka
3/22/2012 15:22	BryantA@lwa.com		Bryant Alvarado
11/15/2010 7:46	CaliforniaWaterTechnologies@gmail.com		Carlos Aguilar
7/6/2009 13:38	City_manager@ci.glendora.ca.us		Chris Jeffers
11/16/2011 7:58	DLiu@DiamondBarCA.Gov		David G. Liu
11/8/2012 15:11	Dan.Askenaizer@WQTS.com		Dan Askenaizer
6/11/2011 22:09	Daniel.Lee@Arcadis-us.com		Daniel K. Lee
2/22/2010 18:03	Dave@Bubalo.com		Dave Sorem
5/2/2011 6:54	Debbie.Neev@gmail.com		Deborah Neev
7/6/2009 13:58	EKiepk@WILLDAN.com		E. Kiepk
7/6/2009 13:21	FredLatham@santafesprings.org		Frederick W. Latham
6/12/2012 11:32	Fresh@freshcreek.com		wallytrnka
10/5/2010 11:14	Gerhardt.Hubner@ventura.org		Gerhardt Hubner
3/22/2010 15:01	Hamid.Tadayon@lacity.org		Hamid Tadayon
7/6/2009 13:07	James.Destefano@ci.diamond-bar.ca.us		James DeStefano
1/19/2010 11:06	Jeremy.Bock@Kiewit.com		Jeremy Bock
3/7/2012 16:27	Jim@CuratingLA.com		Jim Gilbert
7/6/2009 13:35	John.Beshay@westcovina.org		John Beshay
7/28/2011 16:10	Joyntventr@aol.com		Jayne Staley
8/29/2011 14:09	Julie_Carver@ci.pomona.ca.us		Julie Carver
7/6/2009 13:53	Kaden.Young@culvercity.org		Kaden Young
11/16/2011 8:45	LLanger@localgovlaw.com		Lauren Langer
4/5/2011 9:34	Leroy.Richards@msh.dmh.ca.gov		LeRoy Richards
8/25/2010 13:32	Lynn@MLMENG.com		Lynn Kubasek
11/16/2011 8:39	NOENEGRETE@SANTAFESPRINGS.ORG		Noe Negrete
6/8/2010 15:11	Nels@stemmdevelopment.com		Nels Stemm
12/29/2011 11:05	Ppeuron@forestlawn.com		Peter Peuron
11/16/2011 8:43	RYee@DiamondBarCA.Gov		Rick Yee
10/22/2010 15:23	Ramon@calfran.net		Ramon Wagner
7/6/2009 13:51	Rhughes@WILLDAN.com		Roxanne Hughes
4/25/2011 15:19	Robert.Vega@lacity.org		Robert Vega
7/6/2009 11:32	Sandra.Kelley@waterboards.ca.gov		Sandra Kelley
7/6/2009 13:23	Shannon.Yauchzee@westcovina.org		Shannon Yauchzee
7/6/2009 13:49	Skennedy@enfact.net		Sheila Kennedy
7/6/2009 13:55	TLANGE@santa-clarita.com		Travis Lange
7/6/2009 11:29	Theresa.Rodgers@waterboards.ca.gov		Theresa Rodgers
11/7/2011 13:43	Tom.Anderson@bodycote.com		
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3/2/2012 14:56	acallotdavis@rbf.com		Anne Gene Callot Davis
2/16/2012 14:54	aclark@calwater.com		Allyson Clark
9/9/2010 15:25	acruz@ci.burbank.ca.us		Alvin Cruz
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12/12/2011 10:54	adanortega@me.com		Adan Ortega

7/9/2009 10:07	aestrada@sogate.org	Alicia Estrada
7/6/2009 13:47	afarassati@cityofcalabasas.com	Alex Farassati
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7/28/2009 8:26	aibanezjr@gmail.com	alfred ibanez
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11/16/2011 8:59	alexh@ci.commerce.ca.us	Alex Hamilton
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9/10/2010 15:36	alfredo.magallanes@lacity.org	Alfredo Magallanes
6/7/2011 14:18	alindgren@campbellfoundation.org	
9/9/2009 12:40	allenv@contech-cpi.com	Vaikko Allen
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11/16/2011 8:39	andyw@rpv.com	Andy Winje, P.E.
3/30/2012 10:48	ankitavyas@rbf.com	Ankita Vyas
11/9/2011 9:30	anthony.hicke@rcslade.com	Anthony Hicke
1/31/2011 12:11	anu.b.garg@boeing.com	Anu Garg
7/6/2009 13:18	arigg@pvestates.org	Allan Rigg
5/6/2010 7:56	arne.anselm@ventura.org	Arne Anselm
7/6/2009 13:41	ashadbehr@cityofhawthorne.org	Arnold Shadbehr
10/31/2011 10:33	ashlid@lwa.com	Ashli Desai
12/1/2011 10:29	athomas@dpw.lacounty.gov	Anthein Thomas
7/9/2009 9:57	avarela@lakewoodcity.org	Alma Varela
8/12/2010 8:44	bakhavan@mwdh2o.com	Bahram Akhavan
12/22/2011 11:16	barbara.klos@urs.com	Barbara Klos
1/18/2011 13:37	bbax@lacs.org	Beth Bax
11/9/2011 10:17	bburgess6410@yahoo.com	Brandon Burgess
10/15/2012 8:15	bdawadi@civiltec.com	Bed Dawadi
7/1/2012 18:03	bdepoto@yahoo.com	Bill DePoto
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7/6/2009 13:44	biniguez@bellflower.org	Bernie Iniguez
7/6/2009 13:38	binman@ci.sierra-madre.ca.us	Bruce Inman
7/8/2009 10:48	binman@cityofsierramadre.com	Bruce Inman
6/3/2010 12:43	blosey@rbf.com	Brad Losey
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1/13/2011 11:49	bmorales@depintomorales.com	Bob Morales
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12/20/2011 17:23	bpgibson@ucla.edu	Baylor Gibson
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3/22/2011 15:43	calmetals@gmail.com	heather kline

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1/11/2011 22:47 carcharodon29@hotmail.com	Kathy L. Carrillo	
10/24/2012 8:43 carellano@ci.vernon.ca.us	Claudia Arellano	
3/27/2012 8:54 caroline@lawyersforcleanwater.com	Caroline Koch	
7/6/2009 13:41 cbradshaw@ci.claremont.ca.us	Craig Bradshaw	
7/6/2009 13:43 ccash@paramountcity.com	Chris Cash	
5/3/2011 10:15 cchang@wrđ.org	Cathy Chang	
7/6/2009 13:21 ccollins@cityofsanmarino.org	Cindy Collins	
7/6/2009 13:18 cconsunji@ci.norwalk.ca.us	Chino Consunji	
10/5/2010 10:39 ccurtin@citymb.info	Clay Curtin	
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4/5/2012 14:22 cdirenzo@beverlyhills.org	Christian Di Renzo	
6/22/2012 14:29 cdixon@huntingtonpark.org	Christina Dixon	
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7/17/2012 13:59 cgeorge@malibucity.org	Craig George	
5/31/2011 16:57 charpole@newhall.com	Corey Harpole	
7/30/2009 8:44 chris@athrone.com	Chris Rillamas	
10/22/2010 15:24 chris@calfran.net	Chris Allen	
4/23/2012 20:12 chrism@lwa.com	chris minton	
7/6/2009 13:08 citymanager@hiddenhillscity.org	Cherie L. Paglia	
9/6/2011 10:12 clapaz@infeng.co	Chris Lapaz	
7/23/2009 16:10 clee@rwglaw.com	Candice Lee	
7/6/2009 13:19 clehr@rpv.com	Carolyn Lehr	
3/16/2010 12:47 clopez@dpw.lacounty.gov	Christopher Lopez	
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8/13/2010 6:22 cmansell@cmansell.com	clarence c mansell jr	
7/6/2009 13:55 cmeeker@cityofalhambra.org	Claudine Meeker	
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10/2/2012 16:13 connie@csgcalifornia.com	Connie Gallippi	
8/7/2009 13:15 creyes@lvmwd.com	Carlos G. Reyes	
7/5/2012 14:06 crholguin@yahoo.com	claudia holguin	
7/6/2009 13:54 croberts@aaeinc.com	Cory Roberts	
11/16/2011 9:00 croberts@infeng.co	Cory Roberts	
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5/11/2011 11:43 csantos@waterboards.ca.gov	Carlos D. Santos	
6/26/2012 11:30 ctregulations@gmail.com	Jennifer Claassen	
11/11/2011 10:06 ctyrrell@rmcwater.com	Catherine Tyrrell	
11/16/2011 8:45 cwebster@comptoncity.org	Carolyn Webster	
3/2/2011 8:40 cwhite1@wm.com	Chuck White	
5/12/2011 22:58 cyanda@gmail.com	Catherine Yanda	
11/10/2010 9:50 cynthia_gabaldon@urscorp.com	Cynthia Gabaldon	
4/10/2012 12:28 damian@stormwaterindustries.com	Damian Reyes	
7/6/2009 13:42 danflorescu@caaprofessionals.com	Dan Florescu	
12/1/2011 15:37 danielle.sakai@bbklaw.com	Danielle Sakai	
10/28/2011 12:21 dapt@rbf.com	Daniel Apt	

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11/16/2011 8:41 dchankin@bellflower.org	Deborah Chankin
9/24/2011 19:26 dclark@bluescapeinc.com	dwright Clark
7/6/2009 13:08 ddavies@ci.glendora.ca.us	Dave Davies
11/16/2011 9:01 ddolphin@cityofalhambra.org	David Dolphin
8/21/2009 14:15 dduncan@fire.lacounty.gov	Dan Duncan
2/1/2011 6:50 dduncan@santa-clarita.com	Dan Duncan
11/9/2010 18:17 deana@aquabio.us	DeAna Vitela-Hayashi
11/16/2011 8:40 denise_reyna@ci.pomona.ca.us	Denise Reyna
11/16/2011 8:47 dgilbertson@rkagroup.com	David Gilbertson
5/9/2012 8:28 dgould@stormwaterusa.com	Derek A. Gould
1/25/2011 18:02 dgrilley@sgch.org	Daren Grilley
5/31/2012 14:03 dguillory@mwdh2o.com	Daniel Guillory
12/15/2009 14:34 diane@plas-tal.com	Diane Sercu
1/24/2011 14:53 dick.hogan@semco.com	Richard C. Hogan
11/8/2011 13:57 dick@pwenvironmental.com	dick botke
10/5/2012 15:01 dillardjoyce@yahoo.com	Joyce Dillard
5/29/2012 8:09 dion.coluso@lacity.org	Dion Coluso
7/6/2009 13:10 dkeesey@ci.la-verne.ca.us	Daniel Keesey
9/27/2010 10:39 dklinger@pih.net	Dave Klinger
11/9/2010 15:23 dlippman@lvmwd.com	
7/6/2009 13:48 dlopez@baldwinpark.com	David Lopez
7/6/2009 13:34 dlopez@pico-rivera.org	Debbie Lopez
10/17/2012 12:06 dmcalister@eaglereef.net	David McAlister
10/19/2010 8:33 dmorone@gdandb.com	Danielle K. Morone
7/8/2010 10:07 dn@davidnahai.com	David Nahai
7/6/2009 13:39 donjensen@santafesprings.org	Donald K. Jensen
7/6/2009 13:47 dougp@ci.rolling-hills-estates.ca.us	Douglas Prichard
7/6/2009 13:57 dpankau@cityofcalabasas.com	Daniel Pankau
11/9/2010 15:47 dparkinson@geosyntec.com	David Parkinson
7/6/2009 13:24 dpelser@cityofwhittier.org	David Pelser
6/15/2011 16:54 drew.beck@psomas.com	Drew Beck
11/16/2011 8:01 drix@cityofpasadena.net	Daniel Rix
7/6/2009 13:49 drynn@ci.burbank.ca.us	Daniel Rynn
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10/13/2011 11:38 dustin.bambic@tetrattech.com	Dustin Bambic
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10/28/2009 14:20 rsoto@ci.vernon.ca.us	Rafael Soto
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3/4/2011 13:50 rtremblay@lacsds.org	Raymond L Tremblay
7/6/2009 13:53 rvasquez@scsengineers.com	Ralph Vasquez
4/14/2010 11:46 rveiga@waterboards.ca.gov	Rebecca Veiga Nascimento
11/12/2012 20:28 rw@malibu-arts-journal.com	
3/23/2011 11:22 rwang@dpw.lacounty.gov	Ruby Wang
4/8/2011 13:18 rwatson@rwaplanning.com	Richard A. Watson
8/6/2009 16:44 rwellington@willdan.com	Ray Wellington
7/6/2009 13:23 rwishner@ci.walnut.ca.us	Rob Wishner
2/15/2011 10:36 s.guldimann@gmail.com	Suzanne Guldimann
7/6/2009 13:49 sam.gutierrez@westcovina.org	Sam Gutierrez
6/15/2012 13:49 sandym@lwa.com	Sandy Mathews
7/6/2009 13:52 sarinamoraleschoate@santafesprings.org	Sarina Morales-Choate
8/3/2009 6:17 sbarankiewicz@ohslegal.com	Stan M. Barankiewicz II
8/3/2009 10:47 scheng@sgch.org	Angela Cheng
12/13/2011 11:08 sean.j.dunn@damco.com	Sean Dunn
5/3/2010 17:44 selimeren@gmail.com	SELIM EREN
11/9/2010 15:56 seth.carr@lacity.org	seth carr
6/7/2012 10:43 sfleischli@nrhc.org	Steve Fleischli
7/6/2009 13:43 sfurukawa@ci.south-pasadena.ca.us	Shin Furukawa
7/6/2009 13:25 sgrund@lacsds.org	Shannon Grund
7/6/2009 13:11 shahram.kharaghani@lacity.org	Shahram Kharaghani
2/21/2012 8:50 shawn.hagerty@bbklaw.com	Shawn Hagerty
11/16/2011 8:40 shenley@covinaca.gov	Steve Henley
8/16/2012 16:37 simran@northeasttrees.org	Simran Sikand

7/6/2009 11:32 skelley@waterboards.ca.gov	Sandra Kelley
9/14/2012 14:28 smandegari@greenesol.com	shirin mandegari
2/23/2011 10:55 smartin@remet.com	Scott Martin
11/30/2009 14:50 smurow@moote.com	Steven Murow
11/16/2011 8:01 smyrter@cityofsignalhill.org	Steve Myrter
2/2/2011 14:43 snania@forester.net	
9/10/2009 15:31 snissman@bos.lacounty.gov	Susan Nissman
7/6/2009 13:46 sochoa@ci.monrovia.ca.us	Scott Ochoa
5/11/2012 14:33 soligeorge@chevron.com	Soli George
6/6/2012 16:51 sperlstein@weho.org	Sharon Perlstein
11/9/2012 10:07 srapoport@waterboards.ca.gov	Shana Rapoport
11/15/2011 15:20 srigg@ci.vernon.ca.us	Scott Rigg
5/31/2011 16:28 ssanchez@bialav.org	Sandy Sanchez
1/30/2012 13:55 ssantilena@healthebay.org	Susie Santilena
2/9/2012 12:40 sschuyler@biasc.org	steven schuyler
12/20/2011 12:32 stanleys@uppercrustent.com	Stanley Shimabuku
11/16/2011 8:59 steve.huang@redondo.org	Steve Huang
1/14/2010 14:32 stormwatercentral@gmail.com	Anna Hensley
6/19/2012 17:02 sturney@weho.org	Susannah Turney
5/31/2011 16:33 suhles@delanegroup.com	Scott Uhles
5/27/2012 12:38 suzi_youssef@ymail.com	Suzi Youssef
11/16/2011 8:46 swalker@cityofpasadena.net	Stephen Walker
5/27/2010 11:33 symeon.finch@orco.com	Symeon Finch
7/6/2009 13:08 szurn@ci.glendale.ca.us	Stephen M. Zurn
11/10/2011 9:40 tajenkins@sgvwater.com	Thomas A. Jenkins
6/8/2012 15:29 tattnlaw@gmail.com	JOHNTOMMY ROSAS
7/6/2009 13:04 tcoroalles@cityofcalabasas.com	Anthony Coroaalles
7/31/2009 15:57 tford@smbaykeeper.org	Tom Ford
2/23/2012 8:33 tiffanyshedrick@santafesprings.org	Tiffany Shedrick
5/31/2011 16:30 tom.mitchell@pardeehomes.com	Tom Mitchell
12/15/2009 10:51 tony.barboza@latimes.com	Tony Barboza
3/23/2010 11:19 tony.pepe@csun.edu	Tony Pepe
9/16/2010 10:20 tony@csstudios.com	Tony Ignacio
2/20/2012 13:01 tracy@egoscuelaw.com	Tracy Egoscue
7/6/2009 13:10 trobinson@cityoflamirada.org	Tom E. Robinson
7/6/2009 11:29 trodgers@waterboards.ca.gov	Theresa Rodgers
11/14/2011 8:33 tsmith@bonterraconsulting.com	Thomas Smith
7/6/2009 12:59 ttait@ci.arcadia.ca.us	Tom Tait
7/6/2009 13:22 tybarra@soelmonte.org	Tony Ybarra
4/3/2011 19:01 uhdenr@metro.net	Roger Uhden
6/17/2011 20:16 uyeda@pbworld.com	Pamela Uyeda
7/6/2009 13:42 vcastro@ci.covina.ca.us	Vivian Castro
4/11/2011 13:02 vcastro@covinaca.gov	Vivian Castro
1/24/2011 11:30 vhevener@ci.arcadia.ca.us	Vanessa Hevener
11/7/2011 11:10 victor.kennedy@cshs.org	Victor Kennedy
11/16/2011 8:39 vpeterson@malibucity.org	Vic Peterson
10/28/2010 12:38 vsalazar@ldcla.com	Victor Salazar PE

7/6/2009 13:03 vsinghal@baldwinpark.com	Vijay Singhal
2/18/2011 11:31 wade@grahamstudio.net	Wade Graham
2/21/2012 4:06 wbotha@brownandwinters.com	Wentzelee Botha
6/29/2011 9:59 wcaffrey@vandermostconsulting.com	wade caffrey
12/29/2011 11:17 welchrc@pbworld.com	Robert Welch
11/14/2011 16:14 wgross@lacs.org	bill gross
8/6/2012 10:00 wjohnson@dpw.lacounty.gov	William Johnson
7/6/2009 13:52 wrlindinc@aol.com	Wes Lind
8/17/2011 11:33 wynesta@earthlink.net	Wynesta Dale
11/16/2011 8:58 ykwan@lcf.ca.gov	Ying Kwan
7/6/2009 13:35 ys@cityofrh.net	Yolanta Schwartz
12/6/2010 17:34 ysim@dpw.lacounty.gov	Youn Sim
9/17/2010 8:45 zora.baharians@lacity.org	Zora

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

LOS ANGELES REGION

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576 - 6600 • Fax (213) 576 - 6640
<http://www.waterboards.ca.gov/losangeles>

**ORDER NO. R4-2012-XXXX
NPDES PERMIT NO. CAS004001**

**WASTE DISCHARGE REQUIREMENTS
FOR MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) DISCHARGES WITHIN THE
COASTAL WATERSHEDS OF LOS ANGELES COUNTY, EXCEPT THOSE DISCHARGES
ORIGINATING FROM THE CITY OF LONG BEACH MS4**

The municipal discharges of storm water and non-storm water by the Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the coastal watersheds of Los Angeles County ~~Flood Control District~~ with the exception of the City of Long Beach (hereinafter referred to separately as Permittees and jointly as the Dischargers) from the discharge points identified below are subject to waste discharge requirements as set forth in this Order.

I. FACILITY INFORMATION

Table 1. Discharger Information

Dischargers	The Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the <u>coastal watersheds of</u> Los Angeles County Flood Control District with the exception of the City of Long Beach (See Table 4)
Name of Facility	Municipal Separate Storm Sewer Systems (MS4s) within the <u>coastal watersheds of</u> Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the Los Angeles County Flood Control District with the exception of the City of Long Beach <u>MS4</u>
Facility Address	Various (see Table 2) Various (see Table 2)
The U.S. Environmental Protection Agency (USEPA) and the California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board) have classified the Greater Los Angeles County MS4 as a large municipal separate storm sewer system (MS4) pursuant to 40 CFR section 122.26(b)(4) and a major facility pursuant to 40 CFR section 122.2.	

Table 2. Facility Information

Permittee (WDID)	Contact Information	
Agoura Hills (4B190147001)	Mailing Address	30001 Ladyface Court Agoura Hills, CA 91301

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Permittee (WDID)	Contact Information	
	Facility Contact, Title, and E-mail	Ken Berkman, City Engineer kberkman@agoura-hills.ca.us
Alhambra (4B190148001)	Mailing Address	111 South First Street Alhambra, CA 91801-3796
	Facility Contact, Title, and E-mail	David Dolphin ddolphin@cityofalhambra.org
Arcadia (4B190149001)	Mailing Address	P.O. Box 60021 Arcadia, CA 91066-6021
	Facility Contact, Title, and E-mail	Susannah Turney, Environmental Services Officer vhevener@ci.arcadia.ca.us
Artesia (4B190150001)	Mailing Address	18747 Clarkdale Avenue Artesia, CA 90701-5899
	Facility Contact, Title, and E-mail	Maria Dadian, Director of Public Works mdadian@cityofartesia.ci.us
Azusa (4B190151001)	Mailing Address	213 East Foothill Boulevard Azusa, CA 91702
	Facility Contact, Title, and E-mail	Carl Hassel, City Engineer chassel@ci.azusa.ca.us
Baldwin Park (4B190152001)	Mailing Address	14403 East Pacific Avenue Baldwin Park, CA 91706-4297
	Facility Contact, Title, and E-mail	David Lopez, Associate Engineer dlopez@baldwinpark.com
Bell (4B190153001)	Mailing Address	6330 Pine Avenue Bell, CA 90201-1291
	Facility Contact, Title, and E-mail	Terri Rodrigue, City Engineer trodrigue@cityofbell.org
Bell Gardens (4B190139002)	Mailing Address	7100 South Garfield Avenue Bell Gardens, CA 90201-3293
	Facility Contact, Title, and Phone	John Oropeza, Director of Public Works (562) 806-7700
Bellflower (4B190154001)	Mailing Address	16600 Civic Center Drive Bellflower, CA 90706-5494
	Facility Contact, Title, and E-mail	Bernie Iniguez, Environmental Services Manager biniguez@bellflower.org
Beverly Hills (4B190132002)	Mailing Address	455 North Rexford Drive Beverly Hills, CA 90210
	Facility Contact, Title, and E-mail	Vincent Chee, Project Civil Engineer kgettler@beverlyhills.org
Bradbury (4B190155001)	Mailing Address	600 Winston Avenue Bradbury, CA 91010-1199
	Facility Contact, Title, and E-mail	Elroy Kiepke, City Engineer mkeith@cityofbradbury.org
Burbank (4B190101002)	Mailing Address	P.O. Box 6459 Burbank, CA 91510
	Facility Contact, Title, and E-mail	Bonnie Teaford, Public Works Director bteaford@ci.burbank.ca.us
Calabasas (4B190157001)	Mailing Address	100 Civic Center Way Calabasas, CA 91302-3172
	Facility Contact, Title, and E-mail	Alex Farassati, ESM afarassati@cityofcalabasas.com
Carson (4B190158001)	Mailing Address	P.O. Box 6234 Carson, CA 90745

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Permittee (WDID)	Contact Information	
	Facility C ontact, T itle, and E-mail	Patricia Elkins, Building Construction Manager pelkins@carson.ca.us
	Mailing Address	P.O. Box 3130 Cerritos, CA 90703-3130
Cerritos (4B190159001)	Facility C ontact, T itle, and E-mail	Mike O'Grady, Environmental Services mo'grady@cerritos.us
	Mailing Address	207 Harvard Avenue Claremont, CA 91711-4719
Claremont (4B190160001)	Facility C ontact, T itle, and E-mail	Craig Bradshaw, City Engineer cbradshaw@ci.claremont.ca.us
	Mailing Address	2535 Commerce Way Commerce, CA 90040-1487
Commerce (4B190161001)	Facility C ontact, t itle, and E-mail	Gina Nila gnila@ci.commerce.ca.us
	Mailing Address	205 South Willowbrook Avenue Compton, CA 90220-3190
Compton (4B190162001)	Facility C ontact, T itle, and Phone	Hien Nguyen, Assistant City Engineer (310)-761-1476
	Mailing Address	125 East College Street Covina, CA 91723-2199
Covina (4B190163001)	Facility C ontact, T itle, and E-mail	Vivian Castro, Environmental Services Manager vcastro@covinaca.gov
	Mailing Address	P.O. Box 1007 Cudahy, CA 90201-6097
Cudahy (4B190164001)	Facility C ontact, T itle, and E-mail	Hector Rodriguez, City Manager hrodriguez@cityofcudahy.ca.us
	Mailing Address	9770 Culver Boulevard Culver City, CA 90232-0507
Culver City (4B190165001)	Facility C ontact, T itle, and Phone	Damian Skinner, Manager (310)-253-6421
	Mailing Address	21825 East Copley Drive Diamond Bar, CA 91765-4177
Diamond Bar (4B190166001)	Facility C ontact, T itle, and E-mail	David Liu, Director of Public Works dliu@diamondbarca.gov
	Mailing Address	P.O. Box 7016 Downey, CA 90241-7016
Downey (4B190167001)	Facility C ontact, t itle, and E-mail	Yvonne Blumberg yblumberg@downeyca.org
	Mailing Address	1600 Huntington Drive Duarte, CA 91010-2592
Duarte (4B190168001)	Facility C ontact, T itle, and Phone	Steve Esbenshades, Engineering Division Manager (626) 357-7931 ext. 233
	Mailing Address	P.O. Box 6008 El Monte, CA 91731
El Monte (4B190169001)	Facility C ontact, T itle, and Phone	James A Enriquez, Director of Public Works (626) 580-2058
	Mailing Address	350 Main Street El Segundo, CA 90245-3895
El Segundo (4B190170001)	Facility C ontact, T itle, P hone, and E-mail	Stephanie Katsouleas, Public Works Director (310) 524-2356 skatsouleas@elsegundo.org

Permittee (WDID)	Contact Information	
Gardena (4B190118002)	Mailing Address	P.O. Box 47003 Gardena, CA 90247-3778
	Facility Contact, Title, and E-mail	Ron Jackson, Building Maintenance Supervisor jfelix@ci.gardena.ci.us
Glendale (4B190171001)	Mailing Address	Engineering Section, 633 East Broadway, Room 209 Glendale, CA 91206-4308
	Facility Contact, Title, and E-mail	Maurice Oillataguerre, Senior Environmental Program Scientist moillataguerre@ci.glendale.ca.us
Glendora (4B190172001)	Mailing Address	116 East Foothill Boulevard Glendora, CA 91741
	Facility Contact, Title, and E-mail	Dave Davies, Deputy Director of Public Works ddavies@ci.glendora.ca.us
Hawaiian Gardens (4B190173001)	Mailing Address	21815 Pioneer Boulevard Hawaiian Gardens, CA 90716
	Facility Contact, Title, and E-mail	Joseph Colombo, Director of Community Development jcolombo@ghcity.org
Hawthorne (4B190174001)	Mailing Address	4455 West 126 th Street Hawthorne, CA 90250-4482
	Facility Contact, Title, and E-mail	Arnold Shadbehr, Chief General Service and Public Works Arnold Shadbehr, Chief General Service and Public Works ashadbehr@cityofhawthorne.org
Hermosa Beach (4B190175001)	Mailing Address	1315 Valley Drive Hermosa Beach, CA 90254-3884
	Facility Contact, Title, and E-mail	Homayoun Behboodi, Associate Engineer hbehboodi@hermosabch.org
Hidden Hills (4B190176001)	Mailing Address	6165 Spring Valley Road Hidden Hills, CA 91302
	Facility Contact, Title, and Phone	Kimberly Colberts, Environmental Coordinator (310) 257-2004
Huntington Park (4B190177001)	Mailing Address	6550 Miles Avenue Huntington Park, CA 90255
	Facility Contact, Title, and Phone	Craig Melich, City Engineer and City Official (323) -584-6253
Industry (4B190178001)	Mailing Address	P.O. Box 3366 Industry, CA 91744-3995
	Facility Contact and Title	Mike Nagaoka, Director of Public Safety
Inglewood (4B190179001)	Mailing Address	1 W. Manchester Blvd, 3 rd Floor Inglewood, CA 90301-1750
	Facility Contact, Title, and E-mail	Lauren Amimoto, Senior Administrative Analyst lamimoto@cityofinglewood.org
Irwindale (4B190180001)	Mailing Address	5050 North Irwindale Avenue Irwindale, CA 91706
	Facility Contact, Title, and E-mail	Kwok Tam, Director of Public Works ktam@ci.irwindale.ca.us
La Canada Flintridge (4B190181001)	Mailing Address	1327 Foothill Boulevard La Canada Flintridge, CA 91011-2137
	Facility Contact, Title, and E-mail	Edward G. Hitti, Director of Public Works ehitti@lcf.ca.gov
La Habra	Mailing Address	1245 North Hacienda Boulevard

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Permittee (WDID)	Contact Information	
Heights (4B190182001)		La Habra Heights, CA 90631-2570
	Facility Contact, Title, and E-mail	Shauna Clark, City Manager shaunac@lhcity.org
La Mirada (4B190183001)	Mailing Address	13700 La Mirada Boulevard La Mirada, CA 90638-0828
	Facility Contact, Title, and E-mail	Steve Forster, Public Works Director sforster@cityoflamirada.org
La Puente (4B190184001)	Mailing Address	15900 East Marin Street La Puente, CA 91744-4788
	Facility Contact, Title, and E-mail	John DiMario, Director of Development Services jdimario@lapuente.org
La Verne (4B190185001)	Mailing Address	3660 "D" Street La Verne, CA 91750-3599
	Facility Contact, Title, and E-mail	Daniel Keeseey, Director of Public Works dkeeseey@ci.la-verne.ca.us
Lakewood (4B190186001)	Mailing Address	P.O. Box 158 Lakewood, CA 90714-0158
	Facility Contact, Title, and E-mail	Konya Vivanti kvivanti@lakewoodcity.org
Lawndale (4B190127002)	Mailing Address	14717 Burin Avenue Lawndale, CA 90260
	Facility Contact and Title	Marlene Miyoshi, Senior Administrative Analyst
Lomita (4B190187001)	Mailing Address	P.O. Box 339 Lomita, CA 90717-0098
	Facility Contact, Title, and E-mail	Tom A. Odom, City Administrator d.tomita@lomitacity.com
Los Angeles (4B190188001)	Mailing Address	1149 S. Broadway, 10 th Floor Los Angeles, CA 90015
	Facility Contact, Title, and Phone	Shahram Kharaghani, Program Manager (213) 485-0587
Lynwood (4B190189001)	Mailing Address	11330 Bullis Road Lynwood, CA 90262-3693
	Facility Contact, Title, and Phone	Josef Kekula (310)-603-0220 ext. 287
Malibu (4B190190001)	Mailing Address	23825 Stuart Ranch Road Malibu, CA 90265-4861
	Facility Contact, Title, and E-mail	Jennifer Brown, Environmental Program Analyst jbrown@malibucity.org
Manhattan Beach (4B190191001)	Mailing Address	1400 Highland Avenue Manhattan Beach, CA 90266-4795
	Facility Contact, Title, and Email	Brian Wright, Water Supervisor bwright@citymb.info
Maywood (4B190192001)	Mailing Address	4319 East Slauson Avenue Maywood, CA 90270-2897
	Facility Contact, Title, and Phone	Andre Dupret, Project Manager (323)-562-5721
Monrovia (4B190193001)	Mailing Address	415 South Ivy Avenue Monrovia, CA 91016-2888
	Facility Contact, Title, and E-mail	Heather Maloney hmaloney@ci.monrovia.ca.gov

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Permittee (WDID)	Contact Information	
Montebello (4B190194001)	Mailing Address	1600 West Beverly Boulevard Montebello, CA 90640-3970
	Facility Contact and E-mail, title, and Phone	Cory Roberts croberts@aaeinc.com
Monterey Park (4B190195001)	Mailing Address	320 West Newmark Avenue Monterey Park, CA 91754-2896
	Facility Contact, Phone, title, and E-mail	Amy Ho (626) 307-1383 amho@montereypark.ca.gov John Hunter (Consultant) at jhunter@jhla.net
Norwalk (4B190196001)	Mailing Address	P.O. Box 1030 Norwalk, CA 90651-1030
	Facility Contact and Title	Chino Consunji, City Engineer
Palos Verdes Estates (4B190197001)	Mailing Address	340 Palos Verdes Drive West Palos Verdes Estates, CA 90274
	Facility Contact, Title, and E-mail	Allan Rigg, Director of Public Works arigg@pvestates.org
Paramount (4B190198001)	Mailing Address	16400 Colorado Avenue Paramount, CA 90723-5091
	Facility Contact, Title, and E-mail	Chris Cash, Utility and Infrastructure Assistant Director ccash@paramountcity.org
Pasadena (4B190199001)	Mailing Address	P.O. Box 7115 Pasadena, CA 91109-7215
	Facility Contact, Title, and E-mail	Stephen Walker swalker@cityofpasadena.net
Pico Rivera (4B190200001)	Mailing Address	P.O. Box 1016 Pico Rivera, CA 90660-1016
	Facility Contact, Title, and E-mail	Art Cervantes, Director of Public Works acervantes@pico-rivera.org
Pomona (4B190145003)	Mailing Address	P.O. Box 660 Pomona, CA 91769-0660
	Facility Contact, Title, and E-mail	Julie Carver, Environmental Programs Coordinator Julie_Carver@ci.pomona.ca.us
Rancho Palos Verdes (4B190201001)	Mailing Address	30940 Hawthorne Boulevard Rancho Palos Verdes, CA 90275
	Facility Contact, Title, and E-mail	Ray Holland, Interim Public Works Director clehr@rpv.com
Redondo Beach (4B190143002)	Mailing Address	P.O. Box 270 Redondo Beach, CA 90277-0270
	Facility Contact, Title, and E-mail	Mike Shay, Principal Civil Engineer mshay@redondo.org
Rolling Hills (4B190202001)	Mailing Address	2 Portuguese Bend Road Rolling Hills, CA 90274-5199
	Facility Contact, Title, and E-mail	Greg Grammer, Assistant to the City Manager ggrammer@rollinghillsestatesca.gov
Rolling Hills Estates (4B190203001)	Mailing Address	4045 Palos Verdes Drive North Rolling Hills Estates, CA 90274
	Facility Contact, Title, and E-mail	Greg Grammer, Assistant to the City Manager ggrammer@rollinghillsestatesca.gov

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Permittee (WDID)	Contact Information	
Rosemead (4B190204001)	Mailing Address	8838 East Valley Boulevard Rosemead, CA 91770-1787
	Facility Contact, Title, and Phone	Chris Marcarello, Director of PW (626)-569-2118
San Dimas (4B190205001)	Mailing Address	245 East Bonita Avenue San Dimas, CA 91773-3002
	Facility Contact, Title, and E-mail	Latoya Cyrus, Environmental Services Coordinator, lcyrus@ci.san-dimas.ca.us
San Fernando (4B190206001)	Mailing Address	117 Macneil Street San Fernando, CA 91340
	Facility Contact, Title, and E-mail	Ron Ruiz, Director of Public Works rruiz@sfcity.org
San Gabriel (4B190207001)	Mailing Address	425 South Mission Drive San Gabriel, CA 91775
	Facility Contact, Title, and Phone	Daren T. Grilley, City Engineer (626)-308-2806 ext. 4631
San Marino (4B190208001)	Mailing Address	2200 Huntington Drive San Marino, CA 91108-2691
	Facility Contact, Title, and E-mail	Chuck Richie, Director of Parks and Public Works crichie@cityofsanmarino.org
Santa Clarita (4B190117001)	Mailing Address	23920 West Valencia Boulevard, Suite 300 Santa Clarita, CA 91355
	Facility Contact, Title, and Phone	Travis Lange, Environmental Services Manager (661)-255-4337
Santa Fe Springs (4B190108003)	Mailing Address	P.O. Box 2120 Santa Fe Springs, CA 90670-2120
	Facility Contact, Title, and E-mail	Sarina Morales-Choate, Civil Engineer Assistant smorales-choate@santafesprings.org
Santa Monica (4B190122002)	Mailing Address	1685 Main Street Santa Monica, CA 90401-3295
	Facility Contact, Title, and E-mail	Neal Shapiro, Urban Runoff Coordinator nshapiro@smgov.net
Sierra Madre (4B190209001)	Mailing Address	232 West Sierra Madre Boulevard Sierra Madre, CA 91024-2312
	Facility Contact, Title, and Phone	James Carlson, Management Analyst (626)-355-7135 ext. 803
Signal Hill (4B190210001)	Mailing Address	2175 Cherry Avenue Signal Hill, CA 90755
	Facility Contact, Title, and Phone, and E-mail	John Hunter (562)-802-7880 jhunter@jlha.net
South El Monte (4B190211001)	Mailing Address	1415 North Santa Anita Avenue South El Monte, CA 91733-3389
	Facility Contact, Title, and Phone	Anthony Ybarra, City Manager (626)-579-6540
South Gate (4B190212001)	Mailing Address	8650 California Avenue South Gate, CA 90280
	Facility Contact, Title, and E-mail	John Hunter (562)-802-7880 jhunter@jlha.net

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Permittee (WDID)	Contact Information	
South Pasadena (4B190213001)	Mailing Address	1414 Mission Street South Pasadena, CA 91030-3298
	Facility Contact, Title, and E-mail	John Hunter (562)-802-7880 jhunter@jlha.net
Temple City (4B190214001)	Mailing Address	9701 Las Tunas Drive Temple City, CA 91780-2249
	Facility Contact, Title, and Phone, and E-mail	Joe Lambert at (626)-285-2171 or John Hunter at (562)-802-7880/ jhunter@jlha.net
Torrance (4B190215001)	Mailing Address	3031 Torrance Boulevard Torrance, CA 90503-5059
	Facility Contact and Title, and Phone	Leslie Cortez, Senior Administrative Assistant
Vernon (4B190216001)	Mailing Address	4305 Santa Fe Avenue Vernon, CA 90058-1786
	Facility Contact, Title, and Phone	Claudia Arellano (323)-583-8811
Walnut (4B190217001)	Mailing Address	P.O. Box 682 Walnut, CA 91788
	Facility Contact and Title, and Phone	Jack Yoshino, Senior Management Assistant
West Covina (4B190218001)	Mailing Address	P.O. Box 1440 West Covina, CA 91793-1440
	Facility Contact, Title, and E-mail	Samuel Gutierrez, Engineering Technician sam.gutierrez@westcovina.org
West Hollywood (4B190219001)	Mailing Address	8300 Santa Monica Boulevard West Hollywood, CA 90069-4314
	Facility Contact, Title, and E-mail	Sharon Perlstein, City Engineer sperlstein@weho.org
Westlake Village (4B190220001)	Mailing Address	31200 Oak Crest Drive Westlake Village, CA 91361
	Facility Contact, Title, and E-mail	Roxanne Hughes, Stormwater Program Coordinator rhughes@wlv.org
Whittier (4B190221001)	Mailing Address	13230 Penn Street Whittier, CA 90602-1772
	Facility Contact, Title, and E-mail	David Mochizuki, Director of Public Works dmochizuki@cityofwhittier.org
County of Los Angeles (4B190107099)	Mailing Address	900 South Fremont Avenue Alhambra, CA 91803
	Facility Contact, Title, and Phone, and E-mail	Gary Hildebrand, Assistant Deputy Director, Division Engineer (626)-458-4300 ghildeb@dpw.lacounty.gov
Los Angeles County Flood Control District (4B190107101)	Mailing Address	900 South Fremont Avenue Alhambra, CA 91803
	Facility Contact, Title, and Phone, and E-mail	Gary Hildebrand, Assistant Deputy Director, Division Engineer (626)-458-4300 ghildeb@dpw.lacounty.gov

Table 3. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
All Municipal Separate Storm Sewer System discharge points within the Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the Los Angeles County Flood Control District with the exception of the City of Long Beach	Storm Water and Non-Storm Water	Numerous	Numerous	Surface waters identified in Tables 2-1, 2-1a, 2-3, and 2-4, and Appendix 1, Table 1 of the <i>Water Quality Control Plan - Los Angeles Region (Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties)</i> , and other unidentified tributaries to these surface waters within the following Watershed Management Areas: (1) Santa Clara River Watershed; (2) Santa Monica Bay Watershed Management Area, including Malibu Creek Watershed and Ballona Creek Watershed; (3) Los Angeles River Watershed; (4) Dominguez Channel and Greater Los Angeles/Long Beach Harbors Watershed Management Area; (5) Los Cerritos Channel and Alamitos Bay Watershed Management Area; (6) San Gabriel River Watershed; and (7) Santa Ana River Watershed. ¹

Table 4. Administrative Information

This Order was adopted by the California Regional Water Quality Control Board, Los Angeles Region on:	<Adoption Date>
This Order becomes effective on:	<Effective Date>
This Order expires on:	<Expiration Date>
In accordance with Title 23, Division 3, Chapter 9 of the California Code of Regulations and Title 40, Part 122 of the Code of Federal Regulations, each Discharger shall file a Report of Waste Discharge as application for issuance of new waste discharge requirements no later than:	180 days prior to the Order expiration date above

¹ Note that the Santa Ana River Watershed lies primarily within the boundaries of the Santa Ana Regional Water Quality Control Board. However, a portion of the Chino Basin subwatershed lies within the jurisdictions of Pomona and Claremont in Los Angeles County. The primary receiving waters within the Los Angeles County portion of the Chino Basin subwatershed are San Antonio Creek and Chino Creek.

In accordance with section 2235.4 of Title 23 of the California Code of Regulations, the terms and conditions of an expired permit are automatically continued pending issuance of a new permit if all requirements of the federal NPDES regulations on continuation of expired permits are complied with. Accordingly, if a new order is not adopted by the expiration date above, then the Permittees shall continue to implement the requirements of this Order until a new one is adopted.

I, Samuel Unger, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on <Adoption Date>.

Samuel Unger, Executive Officer

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II. FINDINGS

The California Regional Water Quality Control Board, Los Angeles Region (hereinafter Regional Water Board) finds:

A. Nature of Discharges and Sources of Pollutants

Storm water and non-storm water discharges consist of surface runoff generated from various land uses, which are conveyed via the municipal separate storm sewer system and ultimately discharged into surface waters throughout the region. Discharges of storm water and non-storm water from the Municipal Separate Storm Sewer Systems (MS4s) within the Coastal Watersheds of Los Angeles County convey pollutants to surface waters throughout the Los Angeles Region. In general, ~~The~~ ~~the~~ primary pollutants of concern in these discharges, ~~as~~ identified by the Los Angeles County Flood Control District Integrated Receiving Water Impacts Report (1994-2005), are indicator bacteria, total aluminum, copper, lead, zinc, diazinon, and cyanide. Aquatic toxicity, particularly during wet weather, is also a concern based on a review of Annual Monitoring Reports from 2005-10. Storm water and non-storm water discharges of debris and trash are also a pervasive water quality problem in the Los Angeles Region though significant strides have been made by a number of Permittees in addressing this problem through the implementation of control measures to achieve wasteload allocations established in trash TMDLs.

Pollutants in storm water and non-storm water have damaging effects on both human health and aquatic ecosystems. Water quality assessments conducted by the Regional Water Board have identified impairment of beneficial uses of water bodies in the Los Angeles Region caused or contributed to by pollutant loading from municipal storm water and non-storm water discharges. As a result of these impairments, there are beach postings and closures, fish consumption advisories, local and global ecosystem and aesthetic impacts from trash and debris, reduced habitat for threatened and endangered species, among others. The Regional Water Board and USEPA have established 33 total maximum daily loads (TMDLs) that identify Los Angeles County MS4 discharges as one of the pollutant sources causing or contributing to these water quality impairments.

B. Permit History

Prior to the issuance of this Order, Regional Water Board Order No. 01-182 served as the NPDES Permit for MS4 storm water and non-storm water discharges within the Coastal Watersheds of the County of Los Angeles. The requirements of Order No. 01-182 applied to the Los Angeles County Flood Control District, the unincorporated areas of Los Angeles County under County jurisdiction, and 84 Cities within the Los Angeles County Flood Control District with the exception of the City of Long Beach. The first county-wide MS4 permit for the County of Los Angeles and the incorporated areas therein was Order No. 90-079, adopted by the Regional Water Board on June 18, 1990.

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Under Order No. 01-182, the Los Angeles County Flood Control District was designated the Principal Permittee, and the County of Los Angeles and 84 incorporated Cities were each designated Permittees. The Principal Permittee coordinated and facilitated activities necessary to comply with the requirements of Order No. 01-182, but was not responsible for ensuring compliance of any of the other Permittees. The designation of a Principal Permittee has not been carried over from Order No. 01-182.

Order No. 01-182 was subsequently amended by the Regional Water Board on September 14, 2006 by Order No. R4-2006-0074 to incorporate provisions consistent with the assumptions and requirements of the Santa Monica Bay Beaches Dry Weather Bacteria TMDL (SMB Dry Weather Bacteria TMDL) waste load allocations (WLAs). As a result of a legal challenge to Order No. R4-2006-0074, the Los Angeles County Superior Court issued a peremptory writ of mandate on July 23, 2010 requiring the Regional Water Board to void and set aside the amendments adopted through Order No. R4-2006-0074 in Order No. 01-182. The Court concluded that the permit proceeding at which Order No. R4-2006-0074 was adopted was procedurally deficient. The Court did not address the substantive merits of the amendments themselves, and thus made no determination about the substantive validity of Order No. R4-2006-0074. In compliance with the writ of mandate, the Regional Water Board voided and set aside the amendments adopted through Order No. R4-2006-0074 on April 14, 2011. This Order reincorporates requirements equivalent to the 2006 provisions to implement the SMB Dry Weather Bacteria TMDL.

In addition, Order No. 01-182 was amended on August 9, 2007 by Order No. R4-2007-0042 to incorporate provisions consistent with the assumptions and requirements of the Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL, and was again amended on December 10, 2009 by Order No. R4-2009-0130 to incorporate provisions consistent with the assumptions and requirements of the Los Angeles River Watershed Trash TMDL.

C. Permit Application

On June 12, 2006, prior to the expiration date of Order No. 01-182, all of the Permittees filed Reports of Waste Discharge (ROWD) applying for renewal of their waste discharge requirements that serve as an NPDES permit to discharge storm water and authorized and conditionally exempt non-storm water through their MS4 to surface waters. Specifically, the Los Angeles County Flood Control District (LACFCD) submitted an ROWD application on behalf of itself, the County of Los Angeles, and 78 other Permittees. Several Permittees under Order No. 01-182 elected to not be included as part of the Los Angeles County Flood Control District's ROWD. On June 12, 2006, the Cities of Downey and Signal Hill each submitted an individual ROWD application requesting a separate MS4 Permit; and the Upper San Gabriel River Watershed Coalition, comprised of the cities of Azusa, Claremont, Glendora, Irwindale, and Whittier also submitted an individual ROWD application requesting a separate MS4 Permit for these cities. In 2010, the LACFCD withdrew from its participation in the 2006 ROWD submitted in conjunction with the County and 78 other co-permittees, and submitted a new ROWD also requesting an individual MS4 permit. The LACFCD also requested

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that, if an individual MS4 permit was not issued to it, it no longer be designated as the Principal Permittee and it be relieved of Principal Permittee responsibilities. The Regional Water Board evaluated each of the 2006 ROWDs and notified all of the Permittees that their ROWDs did not satisfy federal storm water regulations contained in the USEPA Interpretive Policy Memorandum on Reapplication Requirements for Municipal Separate Storm Sewer Systems; Final Rule, August 9, 1996 (61 *Fed Reg.* 41697). Because each ROWD did not satisfy federal requirements, the Regional Water Board deemed all four 2006 ROWDs incomplete. The Regional Water Board also evaluated the LACFCD’s 2010 ROWD and found that it too did not satisfy federal requirements for MS4s.

Though five separate ROWDs were submitted, the Regional Water Board retains discretion as the permitting authority to determine whether to issue permits for discharges from MS4s on a system-wide or jurisdiction-wide basis (Clean Water Act (CWA) § 402(p)(3)(B)(i); 40 CFR section 122.26, subdivisions (a)(1)(v) and (a)(3)(ii)). Because of the complexity and networking of the MS4 within Los Angeles County, which often results in commingled discharges, the Regional Water Board has previously adopted a system-wide approach to permitting MS4 discharges within Los Angeles County.

In evaluating the five separate ROWDs, the Regional Water Board considered the appropriateness of permitting discharges from MS4s within Los Angeles County on a system-wide or jurisdiction-wide basis or a combination of both. Based on that evaluation, the Regional Water Board again determined that, because of the complexity and networking of the MS4 within Los Angeles County, that one system-wide permit is appropriate. In order to provide individual Permittees with more specific requirements, certain provisions of this Order are organized by watershed management area, which is appropriate given the requirements to implement 33 watershed-based TMDLs. The Regional Water Board also determined that because the LACFCD owns and operates large portions of the MS4 infrastructure, including but not limited to catch basins, storm drains, outfalls and open channels, in each coastal watershed management area within Los Angeles County, the LACFCD should remain a Permittee in the single system-wide permit; however, this Order relieves the LACFCD of its role as “Principal Permittee.”

D. Permit Coverage and Facility Description

The Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the Los Angeles County Flood Control District with the exception of the City of Long Beach (see Table 5, List of Permittees), hereinafter referred to separately as Permittees and jointly as the Dischargers, discharge storm water and non-storm water from municipal separate storm sewer systems (MS4s), also called storm drain systems. For the purposes of this Order, references to the “Discharger” or “Permittee” in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger, or Permittees herein.

The area covered under this Order encompasses more than 3,000 square miles. This area contains a vast drainage network that serves incorporated and unincorporated

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areas in every Watershed Management Area within the Los Angeles Region. Maps depicting the major drainage infrastructure within the area covered under this Order are included in Attachment C of this Order.

Table 5. List of Permittees

Agoura Hills	Hawaiian Gardens	Pomona
Alhambra	Hawthorne	Rancho Palos Verdes
Arcadia	Hermosa Beach	Redondo Beach
Artesia	Hidden Hills	Rolling Hills
Azusa	Huntington Park	Rolling Hills Estates
Baldwin Park	Industry	Rosemead
Bell	Inglewood	San Dimas
Bell Gardens	Irwindale	San Fernando
Bellflower	La Canada Flintridge	San Gabriel
Beverly Hills	La Habra Heights	San Marino
Bradbury	La Mirada	Santa Clarita
Burbank	La Puente	Santa Fe Springs
Calabasas	La Verne	Santa Monica
Carson	Lakewood	Sierra Madre
Cerritos	Lawndale	Signal Hill
Claremont	Lomita	South El Monte
Commerce	Los Angeles	South Gate
Compton	Lynwood	South Pasadena
Covina	Malibu	Temple City
Cudahy	Manhattan Beach	Torrance
Culver City	Maywood	Vernon
Diamond Bar	Monrovia	Walnut
Downey	Montebello	West Covina
Duarte	Monterey Park	West Hollywood
El Monte	Norwalk	Westlake Village
El Segundo	Palos Verdes Estates	Whittier
Gardena	Paramount	County of Los Angeles
Glendale	Pasadena	Los Angeles County Flood
Glendora	Pico Rivera	Control District

E. Los Angeles County Flood Control District

In 1915, the California Legislature enacted the Los Angeles County Flood Control Act, establishing the Los Angeles County Flood Control District (LACFCD). The objects and purposes of the Act are to provide for the control and conservation of the flood, storm and other waste waters within the flood control district. Among its other powers, the LACFCD also has the power to preserve, enhance, and add recreational features to lands or interests in lands contiguous to its properties for the protection, preservation, and use of the scenic beauty and natural environment for the properties or the lands.

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The LACFCD is governed, as a separate entity, by the County of Los Angeles Board of Supervisors.

The LACFCD's system includes the majority of drainage infrastructure within incorporated and unincorporated areas in every watershed, including approximately 500 miles of open channel, 3,500 miles of underground drains, and an estimated 88, ~~800,000~~ catch basins, and several dams. Portions of the LACFCD's current system were originally unmodified natural rivers and water courses.

The LACFCD's system conveys both storm and non-storm water throughout the Los Angeles basin. Other Permittees' MS4s connect and discharge to the LACFCD's system.

The waters and pollutants discharged from the LACFCD's system come from various sources. These sources can include storm water and non-storm water from the Permittees under this permit and other NPDES and non-NPDES Permittees discharging into the LACFCD's system, including industrial waste water dischargers, waste water treatment facilities, industrial and construction stormwater Permittees, water suppliers, government entities, CERCLA potentially responsible parties, and Caltrans. Sources can also include discharges from school districts that do not operate large or medium-sized municipal storm sewers and discharges from entities that have waste discharge requirements or waivers of waste discharge requirements.

Unlike other Permittees, the LACFCD does not own or operate any municipal sanitary sewer systems, public streets, roads, or highways.

The LACFCD has no planning, zoning, development permitting or other land use authority over industrial or commercial facilities, new developments or re-development projects, or development construction sites located in any incorporated or unincorporated areas within its service area. The Permittees that have such land use authority are responsible for implementing a storm water management program to inspect and control pollutants from industrial and commercial facilities, new development and re-development projects, and development construction sites within their jurisdictional boundaries. Nonetheless, as an owner and operator of MS4s, the LACFCD is required by federal regulations to control pollutant discharges into and from its MS4, including the ability to control through interagency agreements among co-Permittees and other owners of a MS4 the contribution of pollutants from one portion of the MS4 to another portion of the MS4.

F. Permit Scope

This Order regulates municipal discharges of storm water and non-storm water from the Permittees' MS4s. Section 122.26(b)(8) of title 40 of the Code of Federal Regulations (CFR) defines an MS4 as "a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) [o]wned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other

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wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States; (ii) [d]esigned or used for collecting or conveying storm water; (iii) [w]hich is not a combined sewer; and (iv) [w]hich is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.”

Storm water discharges consist of those discharges that originate from precipitation events. Federal regulations define “storm water” as “storm water runoff, snow melt runoff, and surface runoff and drainage.” (40 CFR § 122.26(b)(13).) While “surface runoff and drainage” is not defined in federal law, USEPA’s preamble to its final storm water regulations demonstrates that the term is related to precipitation events such as rain and/or snowmelt. (55 *Fed. Reg.* 47990, 47995-96 (Nov. 16, 1990)).

Non-storm water discharges consist of all discharges through an MS4 that do not originate from precipitation events. Non-storm water discharges through an MS4 are prohibited unless authorized under a separate NPDES permit; authorized by USEPA pursuant to Sections 104(a) or 104(b) of the federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); composed of natural flows; the result of emergency fire fighting activities; or conditionally exempted in this Order.

A permit issued to more than one Permittee for MS4 discharges may contain separate storm water management programs for particular Permittees or groups of Permittees. 40 CFR § 122.26(d)(2)(iv). Given the LACFCD’s limited land use authority, it is appropriate for the LACFCD to have a separate and uniquely-tailored storm water management program. Accordingly, the storm water management program minimum control measures imposed on the LACFCD in Part VI.D of this Order differ in some ways from the minimum control measures imposed on other Permittees. Namely, aside from its own properties and facilities, the LACFCD is not subject to the Industrial/Commercial Facilities Program, the Planning and Land Development Program, and the Development Construction Program. However, as a discharger of storm and non-storm water, the LACFCD remains subject to the Public Information and Participation Program and the Illicit Connections and Illicit Discharges Elimination Program. Further, as the owner and operator of certain properties, facilities and infrastructure, the LACFCD remains subject to requirements of a Public Agency Activities Program.

G. Geographic Coverage and Watershed Management Areas

The municipal storm water and non-storm water discharges flow into receiving waters in the Watershed Management Areas of the Santa Clara River Watershed; Santa Monica Bay Watershed Management Area, including Malibu Creek Watershed and Ballona Creek Watershed; Los Angeles River Watershed; Dominguez Channel and Greater Los Angeles/Long Beach Harbors Watershed Management Area; Los Cerritos Channel and Alamitos Bay Watershed Management Area; San Gabriel River Watershed; and Santa Ana River Watershed.

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This Order redefines Watershed Management Areas (WMAs) consistent with the delineations used in the Regional Water Board's Watershed Management Initiative. Permittees included in each of the WMAs are listed in Attachment K.

Maps depicting each WMA, its subwatersheds, and the major receiving waters therein are included in Attachment B.

Federal, state, regional or local entities in jurisdictions outside the Los Angeles County Flood Control District, and not currently named as Permittee to this Order, may operate MS4 facilities and/or discharge to the MS4 and water bodies covered by this Order. Pursuant to 40 CFR sections 122.26(d)(1)(ii) and 122.26(d)(2)(iv), each Permittee shall maintain the necessary legal authority to control the contribution of pollutants to its MS4 and shall include in its storm water management program a comprehensive planning process that includes intergovernmental coordination, where necessary.

Sources of MS4 discharges into receiving waters in the County of Los Angeles but not covered by this Order include the following:

- About 34 square miles of unincorporated area in Ventura County, which drain into Malibu Creek and then to Santa Monica Bay,
- About 9 square miles of the City of Thousand Oaks, which also drain into Malibu Creek and then to Santa Monica Bay, and
- About 86 square miles of area in Orange County, which drain into Coyote Creek and then into the San Gabriel River.

Specifically, the Orange County Flood Control District (OCFCD) owns and operates the Los Alamitos Retarding Basin and Pumping Station (Los Alamitos Retarding Basin). The Los Alamitos Retarding Basin is within the San Gabriel River Watershed, and is located adjacent to the Los Angeles and Orange County boundary. The majority of the 30-acre Los Alamitos Retarding Basin is in Orange County; however, the northwest corner of the facility is located in the County of Los Angeles. Storm water and non-storm water discharges, which drain to the Los Alamitos Retarding Basin, are pumped to the San Gabriel River Estuary (SGR Estuary) through pumps and subterranean piping. The pumps and discharge point are located in the County of Los Angeles.

The OCFCD pumps the water within the Los Alamitos Retarding Basin to the San Gabriel River Estuary through four discharge pipes, which are covered by tide gates. The discharge point is located approximately 700 feet downstream from the 2nd Street Bridge in Long Beach. The total pumping capacity of the four pumps is 800 cubic feet per second (cfs). There is also a 5 cfs sump pump that discharges nuisance flow continuously to the Estuary through a smaller diameter uncovered pipe.

The discharge from the Los Alamitos Retarding Basin is covered under the Orange County Municipal NPDES Storm Water Permit (NPDES Permit No. CAS618030, Santa Ana Regional Water Quality Control Board Order No. R8-2010-0062), which was issued to the County of Orange, Orange County Flood Control District and Incorporated Cities on May 22, 2009. The Orange County MS4 Permit references the San Gabriel River Metals and Selenium TMDL (Metals TMDL). The waste load allocations listed in the

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Metals TMDL for Coyote Creek are included in the Orange County MS4 Permit. However, the Orange County MS4 Permit does not contain the dry weather copper waste load allocations assigned to the Estuary.

G. Legal Authorities

This Order is issued pursuant to CWA section 402 and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). This Order serves as an NPDES permit for point source discharges from the Permittees' MS4s to surface waters. This Order also serves as waste discharge requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with Section 13260).

H. Municipal Separate Storm Sewer System Requirements. The 1972 Clean Water Act² established the NPDES Program to regulate the discharge of pollutants from point sources to waters of the United States. However, pollution from storm water and dry-weather urban runoff was largely unabated for over a decade. In response to the 1987 Amendments to the Clean Water Act, USEPA developed Phase I of the NPDES Storm Water Permitting Program in 1990, which established a framework for regulating municipal and industrial discharges of storm water and non-storm water. The Phase I program addressed sources of storm water and dry-weather urban runoff that had the greatest potential to negatively impact water quality. In particular, under Phase I, USEPA required NPDES Permit coverage for discharges from medium and large MS4 with populations of 100,000 or more. Operators of MS4s regulated under the Phase I NPDES Storm Water Program were required to obtain permit coverage for municipal discharges of storm water and non-storm water to waters of the United States

Early in the history of this MS4 Permit, the Regional Water Board designated the MS4s owned and/or operated by the incorporated cities and Los Angeles County unincorporated areas within the Coastal Watersheds of Los Angeles County as a large MS4 due to the total population of Los Angeles County, including that of unincorporated and incorporated areas, and the interrelationship between the Permittees' MS4s, pursuant to 40 CFR section 122.26(b)(4). The total population of the cities and County unincorporated areas covered by this Order was 9,519,338 in 2000 and has increased by approximately 300,000 to 9,818,605 in 2010, according to the United States Census.

This Order implements the federal Phase I NPDES Storm Water Program requirements. These requirements include three fundamental elements: (i) a requirement to effectively prohibit non-storm water discharges through the MS4, (ii) requirements to implement controls to reduce the discharge of pollutants to the maximum extent practicable, and (iii) other provisions the Regional Water Board has determined appropriate for the control of such pollutants.

I. Background and Rationale for Requirements. The Regional Water Board developed the requirements in this Order based on information submitted as part of the Permittees' applications, through monitoring and reporting programs, and other available

² Federal Water Pollution Control Act; 33 U.S.C. § 1251 et seq., which, as amended in 1977, is commonly known as the Clean Water Act.

information. In accordance with federal regulations at 40 CFR section 124.8, a Fact Sheet (Attachment F) has been prepared to explain the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing this Order. The Fact Sheet is hereby incorporated into this Order and also constitutes part of the Findings of the Regional Water Board for this Order. Attachments A through E and G through R are also incorporated into this Order.

J. Water Quality Control Plans. The Clean Water Act requires the Regional Water Board to establish water quality standards for each water body in its region. Water quality standards include beneficial uses, water quality objectives and criteria that are established at levels sufficient to protect those beneficial uses, and an antidegradation policy to prevent degrading waters. The Regional Water Board adopted a *Water Quality Control Plan - Los Angeles Region* (hereinafter Basin Plan) on June 13, 1994 and has amended it on multiple occasions since 1994. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters in the Los Angeles Region. Pursuant to California Water Code section 13263(a), the requirements of this Order implement the Basin Plan. Beneficial uses applicable to the surface water bodies that receive discharges from the Los Angeles County MS4 generally include those listed below.

Table 6. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Uses
<p>All Municipal Separate Storm Sewer Systems (MS4s) discharge points within the Los Angeles County <u>coastal watersheds Flood Control District, the County of Los Angeles, and 84 incorporated cities within the Los Angeles County Flood Control District</u> with the exception of the City of Long Beach</p>	<p>Multiple surface water bodies of the Los Angeles Region</p>	<p>Municipal and Domestic Supply (MUN); Agricultural Supply (AGR); Industrial Service Supply (IND); Industrial Process Supply (PROC); Ground Water Recharge (GWR); Freshwater Replenishment (FRSH); Navigation (NAV); Hydropower Generation (POW); Water Contact Recreation (REC-1); Limited Contact Recreation (LREC-1); Non-Contact Water Recreation (REC-2); Commercial and Sport Fishing (COMM); Warm Freshwater Habitat (WARM); Cold Freshwater Habitat (COLD); Preservation of Areas of Special Biological Significance (BIOL); Wildlife Habitat (WILD); Preservation of Rare and Endangered Species (RARE); Marine Habitat (MAR); Wetland Habitat (WET); Migration of Aquatic Organisms (MIGR); Spawning, Reproduction, and/or Early Development (SPWN); Shellfish Harvesting (SHELL)</p>

1. Total Maximum Daily Loads (TMDLs)

Clean Water Act section 303(d)(1) requires each state to identify the waters within its boundaries that do not meet water quality standards. Water bodies that do not meet water quality standards are considered impaired and are placed on the state’s “CWA Section 303(d) List”. For each listed water body, the state is required to establish a TMDL of each pollutant impairing the water quality standards in that water body. A

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TMDL is a tool for implementing water quality standards and is based on the relationship between pollution sources and in-stream water quality conditions. The TMDL establishes the allowable pollutant loadings for a water body and thereby provides the basis to establish water quality-based controls. These controls should provide the pollution reduction necessary for a water body to meet water quality standards. A TMDL is the sum of the allowable pollutant loads of a single pollutant from all contributing point sources (the waste load allocations or WLAs) and non-point sources (load allocations or LAs), plus the contribution from background sources and a margin of safety. (40 CFR section 130.2(i).) MS4 discharges are considered point source discharges.

Numerous receiving waters within Los Angeles County do not meet water quality standards or fully support beneficial uses and therefore have been classified as impaired on the State's 303(d) List. The Regional Water Board and USEPA have each established TMDLs to address many of these water quality impairments. Pursuant to CWA section 402(p)(B)(3)(iii) and 40 CFR section 122.44(d)(1)(vii)(B), this Order includes requirements that are consistent with and implement WLAs that are assigned to discharges from the Los Angeles County MS4 from 33 State-adopted and USEPA established TMDLs. This Order requires Permittees to comply with the TMDL Provisions in Part VI.E and Attachments L through R, which are consistent with the assumptions and requirements of the TMDL WLAs assigned to discharges from the Los Angeles County MS4. A comprehensive list of TMDLs by watershed management area and the Permittees subject to each TMDL is included in Attachment K.

Waste load allocations in these TMDLs are expressed in several ways depending on the nature of the pollutant and its impacts on receiving waters and beneficial uses. Bacteria WLAs assigned to MS4 discharges are expressed as the number of allowable exceedance days that a water body may exceed the Basin Plan water quality objectives for protection of the REC-1 beneficial use. Since the TMDLs and the WLAs contained therein are expressed as receiving water conditions, receiving water limitations have been included in this Order that are consistent with and implement the allowable exceedance day WLAs. Water quality-based effluent limitations are also included equivalent to the Basin Plan water quality objectives to allow the opportunity for Permittees to individually demonstrate compliance at an outfall or jurisdictional boundary, thus isolating the Permittee's pollutant contributions from those of other Permittees and from other pollutant sources to the receiving water.

WLAs for trash are expressed as progressively decreasing allowable amounts of trash discharges from a Permittee's jurisdictional area within the drainage area to the impaired water body. The Trash TMDLs require each Permittee to make annual reductions of its discharges of trash over a set period, until the numeric target of zero trash discharged from the MS4 is achieved. The Trash TMDLs specify a specific formula for calculating and allocating annual reductions in trash discharges from each jurisdictional area within a watershed. The formula results in specified annual amounts of trash that may be discharged from each jurisdiction into the

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receiving waters. Translation of the WLAs or compliance points described in the TMDLs into jurisdiction-specific load reductions from the baseline levels, as specified in the TMDL, logically results in the articulation of an annual limitation on the amount of a pollutant that may be discharged. The specification of allowable annual trash discharge amounts meets the definition of an “effluent limitation”, as that term is defined in subdivision (c) of section 13385.1 of the California Water Code. Specifically, the trash discharge limitations constitute a “numeric restriction ... on the quantity [or] discharge rate ... of a pollutant or pollutants that may be discharged from an authorized location.”

TMDL WLAs for other pollutants (e.g., metals and toxics) are expressed as concentration and/or mass and water quality-based effluent limitations have been specified consistent with the expression of the WLA, including any applicable averaging periods. Some TMDLs specify that, if certain receiving water conditions are achieved, such achievement constitutes attainment of the WLA. In these cases, receiving water limitations and/or provisions outlining these alternate means of demonstrating compliance are included in the TMDL provisions in Part VI.E of this Order.

The inclusion of water quality-based effluent limitations and receiving water limitations to implement applicable WLAs provides a clear means of identifying required water quality outcomes within the permit and ensures accountability by Permittees to implement actions necessary to achieve the limitations.

A number of the TMDLs for bacteria, metals, and toxics establish WLAs that are assigned jointly to a group of Permittees whose storm water and/or non-storm water discharges are or may be commingled in the MS4 prior to discharge to the receiving water subject to the TMDL. TMDLs address commingled MS4 discharges by assigning a WLA to a group of MS4 Permittees based on co-location within the same subwatershed. Permittees with co-mingled MS4 discharges are jointly responsible for meeting the water quality-based effluent limitations and receiving water limitations assigned to MS4 discharges in this Order. "Joint responsibility" means that the Permittees that have commingled MS4 discharges are responsible for implementing programs in their respective jurisdictions, or within the MS4 for which they are an owner and/or operator, to meet the water quality-based effluent limitations and/or receiving water limitations assigned to such commingled MS4 discharges.

In these cases, federal regulations state that co-permittees need only comply with permit conditions relating to discharges from the MS4 for which they are owners or operators (40 CFR § 122.26(a)(3)(vi)). Individual co-permittees are only responsible for their contributions to the commingled MS4 discharge. This Order does not require a Permittee to individually ensure that a commingled MS4 discharge meets the applicable water quality-based effluent limitations included in this Order, unless such Permittee is shown to be solely responsible for an exceedance.

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Additionally, this Order allows a Permittee to clarify and distinguish their individual contributions and demonstrate that its MS4 discharge did not cause or contribute to exceedances of applicable water quality-based effluent limitations and/or receiving water limitations. If such a demonstration is made, though the Permittee’s discharge may commingle with that of other Permittees, the Permittee would not be held jointly responsible for the exceedance of the water quality-based effluent limitation or receiving water limitation. Individual co-permittees who demonstrate compliance with the water quality-based effluent limitations will not be held responsible for violations by non-compliant co-permittees.

Given the interconnected nature of the Permittees’ MS4s, however, the Regional Water Board expects Permittees to work cooperatively to control the contribution of pollutants from one portion of the MS4 to another portion of the system through inter-agency agreements or other formal arrangements.

K. Ocean Plan. In 1972, the State Water Resources Control Board (State Water Board) adopted the Water Quality Control Plan for Ocean Waters of California, California Ocean Plan (hereinafter Ocean Plan). The State Water Board adopted the most recent amended Ocean Plan on September 15, 2009. The Office of Administration Law approved it on March 10, 2010. On October 8, 2010, USEPA approved the 2009 Ocean Plan. The Ocean Plan is applicable, in its entirety, to the ocean waters of the State. In order to protect beneficial uses, the Ocean Plan establishes water quality objectives and a program of implementation. Pursuant to California Water Code section 13263(a), the requirements of this Order implement the Ocean Plan. The Ocean Plan identifies beneficial uses of ocean waters of the State to be protected as summarized in the table below.

Table 7. Ocean Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Uses
<p>All Municipal Separate Storm Sewer Systems (MS4s) discharge points within the Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the Los Angeles County Flood Control District coastal watersheds with the exception of the City of Long Beach</p>	<p>Pacific Ocean</p>	<p>Industrial Water Supply (IND); Water Contact (REC-1) and Non-Contact Recreation (REC-2), including aesthetic enjoyment; Navigation (NAV); Commercial and Sport Fishing (COMM); Mariculture; Preservation and Enhancement of Designated Areas of Special Biological Significance (ASBS); Rare and Endangered Species (RARE); Marine Habitat (MAR); Fish Migration (MIGR); Fish Spawning (SPWN) and Shellfish Harvesting (SHELL)</p>

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L. Antidegradation Policy

40 CFR section 131.12 requires that state water quality standards include an antidegradation policy consistent with the federal antidegradation policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16 ("Statement of Policy with Respect to Maintaining the Quality of the Waters of the State"). Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. The permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.

M. Anti-Backsliding Requirements. Section 402(o)(2) of the CWA and federal regulations at 40 CFR section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this Order are at least as stringent as the effluent limitations in the previous permit.

N. Endangered Species Act. This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code, §§ 2050 to 2115.5) or the Federal Endangered Species Act (16 U.S.C.A., §§ 1531 to 1544). This Order requires compliance with requirements to protect the beneficial uses of waters of the United States. Permittees are responsible for meeting all requirements of the applicable Endangered Species Act.

O. Monitoring and Reporting. Section 308(a) of the federal Clean Water Act, and 40 CFR sections 122.41(h), (j)-(l), 122.41(i), and 122.48, require that all NPDES permits specify monitoring and reporting requirements. Federal regulations applicable to large and medium MS4s also specify additional monitoring and reporting requirements. (40 C.F.R. §§ 122.26(d)(2)(i)(F) & (d)(2)(iii)(D), 122.42(c).) California Water Code section 13383 authorizes the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The Monitoring and Reporting Program establishes monitoring, reporting, and recordkeeping requirements that implement the federal and State laws and/or regulations. This Monitoring and Reporting Program is provided in Attachment E.

P. Standard and Special Provisions. Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR section 122.42, are provided in Attachment D. Dischargers must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR section 122.42 provided in Attachment D. The Regional Water Board has also included in Part VI of this Order various special provisions applicable to the Dischargers. A rationale for the

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various special provisions contained in this Order is provided in the attached Fact Sheet (Attachment F).

Q. State Unfunded Mandates

Article XIII B, Section 6(a) of the California Constitution provides that whenever “any state agency mandates a new program or higher level of service on any local government, the state shall provide a subvention of funds to reimburse that local government for the costs of the program or increased level of service.” The requirements of this Order do not constitute state mandates that are subject to a subvention of funds for several reasons as described in detail in the attached Fact Sheet (Attachment F).

R. California Water Code Section 13241 Economic Considerations. The California Supreme Court has ruled that although California Water Code section 13263 requires the State and Regional Water Boards (collectively, Water Boards) to consider the factors set forth in California Water Code section 13241 when issuing an NPDES permit, the Water Boards may not consider the factors to justify imposing pollutant restriction that are less stringent than the applicable federal regulations require. (*City of Burbank v. State Water Resources Control Bd.* (2005) 35 Cal.4th 613, 618, 626-627). However, when the pollutant restrictions in an NPDES permit are more stringent than federal law requires, California Water Code section 13263 requires that the Water Boards consider the factors described in section 13241 as they apply to those specific restrictions. As noted in the preceding finding, the Regional Water Board finds that the requirements in this permit are not more stringent than the minimum federal requirements. Therefore, a 13241 analysis is not required for permit requirements that implement the effective prohibition on the discharge of non-storm water discharges into the MS4, or for controls to reduce the discharge of pollutants in storm water to the maximum extent practicable, or other provisions that the Regional Water Board has determined appropriate to control such pollutants, as those requirements are mandated by federal law. Notwithstanding the above, the Regional Water Board has developed an economic analysis of the permit’s requirements, consistent with California Water Code section 13241. That analysis is provided in the Fact Sheet (Attachment F of this Order).

T. California Environmental Quality Act (CEQA). This action to adopt an NPDES Permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA) (Public Resources Code, § 21100, et seq.) pursuant to California Water Code section 13389. (*County of Los Angeles v. Cal. Water Boards* (2006) 143 Cal.App.4th 985.)

U. Notification of Interested Parties. In accordance with State and federal laws and regulations, the Regional Water Board has notified the Permittees and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharges authorized by this Order and has provided them with an opportunity to provide written and oral comments. Details of notification, as well as the meetings and workshops held on drafts of the permit, are provided in the Fact Sheet of this Order.

V. Consideration of Public Comment. The Regional Water Board, in a public meeting, heard and considered all oral and written comments pertaining to the discharges

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authorized by this Order and the requirements contained herein. The Regional Water Board has prepared written responses to all timely comments, which are incorporated by reference as part of this Order.

- W. This Order serves as an NPDES permit pursuant to CWA section 402 or amendments thereto, and becomes effective fifty (50) days after the date of its adoption, provided that the Regional Administrator, USEPA, Region IX, expresses no objections.
- X. This Order supersedes Order No. 01-182 as amended, except for enforcement purposes.
- Y. **Review by the State Water Board.** Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must *receive* the petition by 5:00 p.m., 30 days after the Regional Water Board action, except that if the thirtieth day following the action falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

THEREFORE, IT IS HEREBY ORDERED, that the Dischargers, in order to meet the provisions contained in Division 7 of the California Water Code (commencing with section 13000), and regulations, plans, and policies adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following requirements:

III. DISCHARGE PROHIBITIONS

A. Prohibitions – Non-Storm Water Discharges

1. **Prohibition of Non-Storm Water Discharges.** Each Permittee shall, for the portion of the MS4 for which it is an owner or operator, prohibit non-storm water discharges through the MS4 to receiving waters except where such discharges are either:
 - a. Authorized non-storm water discharges separately regulated by an individual or general NPDES permit;
 - b. Temporary non-storm water discharges authorized by USEPA³ pursuant to sections 104(a) or 104(b) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) that either: (i) will comply with water quality standards as applicable or relevant and appropriate requirements (“ARARs”) under section 121(d)(2) of CERCLA; or (ii) are subject to either (a) a written waiver of ARARs by USEPA pursuant to section 121(d)(4) of CERCLA or

³ These typically include short-term, high volume discharges resulting from the development or redevelopment of groundwater extraction wells, or USEPA or State-required compliance testing of potable water treatment plants, as part of a USEPA authorized groundwater remediation action under CERCLA.

- (b) a written determination by USEPA that compliance with ARARs is not practicable considering the exigencies of the situation pursuant to 40 CFR. section 300.415(j);
- c. Authorized non-storm water discharges from emergency fire fighting activities (i.e., flows necessary for the protection of life or property)⁴;
- d. Natural flows, including:
- i. Natural springs;
 - ii. Flows from riparian habitats and wetlands;
 - iii. Diverted stream flows, authorized by the State or Regional Water Board;
 - iv. Uncontaminated ground water infiltration⁵;
 - v. Rising ground waters, where ground water seepage is not otherwise covered by a NPDES permit⁶; or
- e. Conditionally exempt non-storm water discharges in accordance with Parts III.A.2 and III.A.3 below.
- 2. Conditional Exemptions from Non-Storm Water Discharge Prohibition.** The following categories of non-storm water discharges are conditionally exempt from the non-storm water discharge prohibition, provided they meet all required conditions specified below, or as otherwise approved by the Regional Water Board Executive Officer, in all areas regulated by this Order with the exception of direct discharges to Areas of Special Biological Significance (ASBS) within Los Angeles County. Conditional exemptions from the prohibition on non-storm water discharges through the MS4 to an ASBS are identified in Part III.A.3 below.
- a. Conditionally Exempt Essential Non-Storm Water Discharges: These consist of those discharges that fall within one of the categories below; meet all required best management practices (BMPs) as specified in i. and ii. below, including those enumerated in the referenced BMP manuals; are essential public services discharge activities; and are directly or indirectly required by other state or federal statute and/or regulation:
- i. Discharges from essential *non-emergency* fire fighting activities⁷ provided appropriate BMPs are implemented based on the CAL FIRE, Office of the

⁴ Discharges from vehicle washing, building fire suppression system maintenance and testing (e.g., sprinkler line flushing), fire hydrant maintenance and testing, and other routine maintenance activities are not considered emergency fire fighting activities.

⁵ Uncontaminated ground water infiltration is water other than waste water that enters the MS4 (including foundation drains) from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow. (See 40 CFR § 35.2005(20).)

⁶ A NPDES permit for discharges associated with ground water dewatering is required within the Los Angeles Region.

⁷ This includes fire fighting training activities, which simulate emergency responses, and routine maintenance and testing activities necessary for the protection of life and property, including building fire suppression system maintenance and testing (e.g. sprinkler line flushing) and fire

State Fire Marshal's *Water-Based Fire Protection Systems Discharge Best Management Practices Manual* (September 2011) for water-based fire protection system discharges, and based on Riverside County's *Best Management Practices Plan for Urban Runoff Management* (May 1, 2004) or equivalent BMP manual for fire training activities and post-emergency fire fighting activities;

- ii. Discharges from ~~potable water sources~~ drinking water supplier distribution systems, where not otherwise regulated by an individual or general NPDES permit⁸, provided appropriate BMPs are implemented based on the American Water Works Association (California-Nevada Section) *Guidelines for the Development of Your Best Management Practices (BMP) Manual for Drinking Water System Releases* (2005) or equivalent industry standard BMP manual. Additionally, each Permittee shall work with ~~potable drinking~~ water suppliers that may discharge to the Permittee's MS4 to ensure for all discharges greater than 100,000 gallons: (1) notification at least 72 hours prior to a planned discharge and as soon as possible after an unplanned discharge; (2) monitoring of any pollutants of concern⁹ in the ~~potable drinking~~ water supply supplier distribution system release; and (3) record keeping by the ~~potable drinking~~ water supplier. Permittees shall require that the following information is maintained by the drinking water supplier(s) for all discharges to the MS4 (planned and unplanned) greater than 100,000 gallons: name of discharger, date and time of notification (for planned discharges), method of notification, location of discharge, discharge pathway, receiving water, date of discharge, time of the beginning and end of the discharge, duration of the discharge, flow rate or velocity, total number of gallons discharged, type of dechlorination equipment used, type of dechlorination chemicals used, concentration of residual chlorine, type(s) of sediment controls used, pH of discharge, type(s) of volumetric and velocity controls used, and field and laboratory monitoring data. Records shall be retained for five years and made available upon request by the Permittee or Regional Water Board.
- b. Those discharges that fall within one of the categories below, provided that the discharge itself is not a source of pollutants and meets all required conditions specified in Table 8 or as otherwise specified or approved by the Regional Water Board Executive Officer:

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hydrant testing and maintenance. Discharges from vehicle washing are not considered essential and as such are not conditionally exempt from the non-storm water discharge prohibition.

⁸ ~~Potable-Drinking~~ water supplier distribution system releases means sources of flows from drinking water storage, supply and distribution systems (including flows from system failures), pressure releases, system maintenance, distribution line testing, and flushing and dewatering of pipes, reservoirs, and vaults, and minor non-invasive well maintenance activities not involving chemical addition(s) where not otherwise regulated by NPDES Permit No. CAG674001, NPDES Permit No. CAG994005, or an other separate NPDES permit.

⁹ Pollutants of concern from drinking water supplier distribution system releases may include trash and debris, including organic matter, total suspended solids (TSS), residual chlorine, pH, and any pollutant for which there is a water quality-based effluent limitation (WQBEL) in Part VI.E applicable to discharges from the MS4 to the receiving water. Determination of the pollutants of concern for a particular discharge shall be based on an evaluation of the potential for the constituent(s) to be present in the discharge at levels that may cause or contribute to exceedances of applicable WQBELs or receiving water limitations.

- i. Dewatering of lakes¹⁰;
 - ii. Landscape irrigation;
 - iii. Dechlorinated/debrominated swimming pool/spa discharges¹¹, where not otherwise regulated by a separate NPDES permit;
 - iv. Dewatering of decorative fountains¹²;
 - v. Non-commercial car washing by residents or by non-profit organizations;
 - vi. Street/sidewalk wash water¹³.
- 3. Conditional Exemptions from Non-Storm Water Discharge Prohibition within an ASBS.** The following non-storm water discharges from the MS4 directly to an ASBS are conditionally exempt pursuant to the California Ocean Plan as specified below, provided that:
- a. The discharges are essential for emergency response purposes, structural stability, slope stability or occur naturally, including the following discharges:
 - i. Discharges associated with emergency fire fighting activities (i.e., flows necessary for the protection of life or property)¹⁴;
 - ii. Foundation and footing drains;
 - iii. Water from crawl space or basement pumps;
 - iv. Hillside dewatering;
 - v. Naturally occurring ground water seepage via a MS4; and
 - vi. Non-anthropogenic flows from a naturally occurring stream via a culvert or MS4, as long as there are no contributions of anthropogenic runoff.
 - b. The discharges fall within one of the conditionally exempt essential non-storm water discharge categories in Part III.A.2.a. above.
 - c. Conditionally exempt non-storm water discharges shall not cause or contribute¹⁵ to an exceedance of applicable receiving water limitations and/or water quality-

¹⁰ Dewatering of lakes does not include dewatering of drinking water reservoirs. Dewatering of drinking water reservoirs is addressed in [Section Part III.A.2.a.ii.](#)

¹¹ Conditionally exempt dechlorinated/debrominated swimming pool/spa discharges do not include swimming pool/spa filter backwash or swimming pool/spa water containing bacteria, detergents, wastes, or algaecides, or any other chemicals including salts from pools commonly referred to as "salt water pools" in excess of applicable water quality objectives.

¹² Conditionally exempt discharges from dewatering of decorative fountains do not include fountain water containing bacteria, detergents, wastes, or algaecides, or any other chemicals in excess of applicable water quality objectives.

¹³ Conditionally exempt non-storm water discharges of street/sidewalk wash water only include those discharges resulting from use of high pressure, low volume spray washing using only potable water with no cleaning agents at an average usage of 0.006 gallons per square feet of sidewalk area in accordance with Regional Water Board Resolution No. 98-08. Conditionally exempt non-storm water discharges of street/sidewalk wash water do not include hosing of any sidewalk or street with a garden hose with a pressure nozzle.

¹⁴ See note 4.

based effluent limitations in this Order or the water quality objectives in Chapter II of the Ocean Plan, or alter natural ocean water quality in an ASBS.

4. Permittee Requirements. Each Permittee shall:

- a. Develop and implement procedures to ensure that a discharger, if not a named Permittee in this Order, fulfills the following for non-storm water discharges to the Permittee's MS4:
 - i. Notifies the Permittee of the planned discharge in advance, consistent with requirements in Table 8 or recommendations pursuant to the applicable BMP manual;
 - ii. Obtains any local permits required by the MS4 owner(s) and/or operator(s);
 - iii. Provides documentation that it has obtained any other necessary permits or water quality certifications¹⁶ for the discharge;
 - iv. Conducts monitoring of the discharge, if required by the Permittee;
 - v. Implements BMPs and/or control measures as specified in Table 8 or in the applicable BMP manual(s) as a condition of the approval to discharge into the Permittee's MS4; and
 - vi. Maintains records of its discharge to the MS4, consistent with requirements in Table 8 or recommendations pursuant to the applicable BMP manual. For lake dewatering, Permittees shall require that the following information is maintained by the lake owner / operator: name of discharger, date and time of notification, method of notification, location of discharge, discharge pathway, receiving water, date of discharge, time of the beginning and end of the discharge, duration of the discharge, flow rate or velocity, total number of gallons discharged, type(s) of sediment controls used, pH of discharge, type(s) of volumetric and velocity controls used, and field and laboratory monitoring data. Records shall be made available upon request by the Permittee or Regional Water Board.
- b. Develop and implement procedures that minimize the discharge of landscape irrigation water into the MS4 by promoting conservation programs.
 - i. Permittees shall coordinate with the local water purveyor(s), where applicable, to promote landscape water use efficiency requirements for existing landscaping, use of drought tolerant, native vegetation, and the use of less toxic options for pest control and landscape management.

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¹⁵ Based on the water quality characteristics of the conditionally exempt non-storm water discharge itself.

¹⁶ Pursuant to the Federal Clean Water Act § 401.

- ii. Permittees shall develop and implement a coordinated outreach and education program to minimize the discharge of irrigation water and pollutants associated with irrigation water consistent with Part VI.D.4.c of this Order (Public Information and Participation Program).
- c. Evaluate monitoring data collected pursuant to the Monitoring and Reporting Program (MRP) of this Order (Attachment E), and any other associated data or information, and determine whether any of the authorized or conditionally exempt non-storm water discharges identified in Parts III.A.1, III.A.2, and III.A.3 above are a source of pollutants that may be causing or contributing to an exceedance of applicable receiving water limitations in Part V and/or water quality-based effluent limitations in Part VI.E. To evaluate monitoring data, the Permittee shall either use applicable interim or final water quality-based effluent limitations for the pollutant or, if there are no applicable interim or final water quality-based effluent limitations for the pollutant, use applicable action levels provided in Attachment G. Based on non-storm water outfall-based monitoring as implemented through the MRP, if monitoring data show exceedances of applicable water quality-based effluent limitations or action levels, the Permittee shall take further action to determine whether the discharge is causing or contributing to exceedances of receiving water limitations in Part V.
- d. If the Permittee determines that any of the conditionally exempt non-storm water discharges identified in Part III.A.2.b above is a source of pollutants that causes or contributes to an exceedance of applicable receiving water limitations and/or water quality-based effluent limitations, the Permittee(s) shall report its findings to the Regional Water Board in its annual report. Based on this determination, the Permittee(s) shall also either:
 - i. Effectively prohibit¹⁷ the non-storm water discharge to the MS4; or
 - ii. Impose conditions in addition to those in Table 8, subject to approval by the Regional Water Board Executive Officer, on the non-storm water discharge such that it will not be a source of pollutants; or
 - iii. ~~Provide for~~ Require diversion of the non-storm water discharge to the sanitary sewer; or
 - iv. ~~Provide~~ Require treatment of the non-storm water discharge prior to discharge to the receiving water.
- e. If the Permittee determines that any of the authorized or conditionally exempt essential non-storm water discharges identified in Parts III.A.1.a through III.A.1.c, III.A.2.a, or III.A.3 above is a source of pollutants that causes or contributes to an exceedance of applicable receiving water limitations and/or

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¹⁷ To "effectively prohibit" means to not allow the non-storm water discharge through the MS4 unless the discharger obtains coverage under a separate NPDES permit prior to discharge to the MS4.

water quality-based effluent limitations, the Permittee shall notify the Regional Water Board within 30 days if the non-storm water discharge is an authorized discharge with coverage under a separate NPDES permit or authorized by USEPA under CERCLA in the manner provided in Part III.A.1.b above, or a conditionally exempt essential non-storm water discharge or emergency non-storm water discharge.

- f. If the Permittee prohibits the discharge from the MS4, as per Part III.A.4.d.i, then the Permittee shall implement procedures developed under Part VI.D.9 (Illicit Connections and Illicit Discharges Elimination Program) in order to eliminate the discharge to the MS4.
5. If a Permittee demonstrates that the water quality characteristics of a specific authorized or conditionally exempt essential non-storm water discharge resulted in an exceedance of applicable receiving water limitations and/or water quality-based effluent limitations during a specific sampling event, the Permittee shall not be found in violation of applicable receiving water limitations and/or water quality-based effluent limitations for that specific sampling event. Such demonstration must be based on source specific water quality monitoring data from the authorized or conditionally exempt essential non-storm water discharge or other relevant information documenting the characteristics of the specific non-storm water discharge as identified in Table 8.
 6. Notwithstanding the above, the Regional Water Board Executive Officer, based on an evaluation of monitoring data and other relevant information for specific categories of non-storm water discharges, may modify a category or remove categories of conditionally exempt non-storm water discharges from Parts III.A.2 and III.A.3 above if the Executive Officer determines that a discharge category is a source of pollutants that causes or contributes to an exceedance of applicable receiving water limitations and/or water quality-based effluent limitations, or may require that a discharger obtain coverage under a separate individual or general State or Regional Water Board permit for a non-storm water discharge.

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Table 8. Required Conditions for Conditionally Exempt Non-Storm Water Discharges

Discharge Category	General Conditions Under Which Discharge Through the MS4 is Allowed	Conditions/BMPs that are Required to be Implemented Prior to Discharge Through the MS4
All Discharge Categories	See discharge specific conditions below.	<p>Ensure conditionally exempt non-storm water discharges avoid potential sources of pollutants in the flow path to prevent introduction of pollutants to the MS4 and receiving water.</p> <p>Whenever there is a discharge of 100,000 gallons or more into the MS4, Permittees shall require advance notification by the discharger to the potentially affected MS4 Permittees, including at a minimum the LACFCD, if applicable, and the Permittee with jurisdiction over the land area from which the discharge originates.</p>
Dewatering of lakes	Discharge allowed only if all necessary permits/water quality certifications for dredge and fill activities, including water diversions, are obtained prior to discharge.	<p>Ensure procedures for advanced notification by the lake owner / operator to the Permittee(s) no less than 72 hours prior to the planned discharge.</p> <p>Immediately prior to discharge, visible trash on the shoreline or on the surface of the lake shall be removed and disposed of in a legal manner.</p> <p>Immediately prior to discharge, the discharge pathway and the MS4 inlet to which the discharge is directed, shall be inspected and cleaned out.</p> <p>Discharges shall be volumetrically and velocity controlled to minimize resuspension of sediments.</p> <p>Measures shall be taken to stabilize lake bottom sediments.</p> <p>Ensure procedures for water quality monitoring for pollutants of concern¹⁸ in the lake.</p> <p>Ensure record-keeping of lake dewatering by the lake owner / operator.</p>

¹⁸ Pollutants of concern include, at a minimum, trash and debris, including organic matter, TSS, and any pollutant for which there is a water quality-based effluent limitation in Part VI.E for the lake and/or receiving water.

<p>Landscape irrigation using potable water</p>	<p>Discharge allowed if runoff due to potable landscape irrigation is minimized through the implementation of an ordinance specifying water efficient landscaping standards, as well as an outreach and education program focusing on water conservation and landscape water use efficiency.</p>	<p>Implement BMPs to minimize runoff and prevent introduction of pollutants to the MS4 and receiving water. Implement water conservation programs to minimize discharge by using less water.</p>
<p>Landscape irrigation using reclaimed or recycled water</p>	<p>Discharge of reclaimed or recycled water runoff from landscape irrigation is allowed if the discharge is in compliance with the producer and distributor operations and management (O&M) plan, and all relevant portions thereof, including the Irrigation Management Plan.</p>	<p>Discharges must comply with applicable O&M Plans, and all relevant portions thereof, including the Irrigation Management Plan.</p>

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<p>Dechlorinated/ debrominated swimming pool/spa discharges</p>	<p>Discharges allowed after implementation of specified BMPs.</p> <p>Pool or spa water containing copper-based algaecides is not allowed to be discharged to the MS4.</p> <p>Discharges of cleaning waste water and filter backwash allowed only if authorized by a separate NPDES permit.</p>	<p>Implement BMPs and ensure discharge avoids potential sources of pollutants in the flow path to prevent introduction of pollutants prior to discharge to the MS4 and receiving water.</p> <p>Swimming pool water must be dechlorinated or debrominated using holding time, aeration, and/or sodium thiosulfate. Chlorine residual in the discharge shall not exceed 0.1 mg/L.</p> <p>Swimming pool water shall not contain any detergents, wastes, or algaecides, or any other chemicals including salts from pools commonly referred to as “salt water pools” in excess of applicable water quality objectives.¹⁹</p> <p>Swimming pool discharges are to be pH adjusted, if necessary, and be within the range of 6.5 and 8.5 standard units.</p> <p>Swimming pool discharges shall be volumetrically and velocity controlled to promote evaporation and/or infiltration.</p> <p>Ensure procedures for advanced notification by the pool owner to the Permittee(s) at least 72 hours prior to planned discharge for discharges of 100,000 gallons or more.</p> <p><u>For discharges of 100,000 gallons or more, immediately-immediately</u> prior to discharge, the discharge pathway and the MS4 inlet to which the discharge is directed, shall be inspected and cleaned out.</p>
<p>Dewatering of decorative fountains</p>	<p>Discharges allowed after implementation of specified BMPs.</p> <p>Fountain water containing copper-based algaecides may not be discharged to the MS4.</p> <p>Fountain water containing dyes may not be discharged to the MS4.</p>	<p>Implement BMPs and ensure discharge avoids potential sources of pollutants in the flow path to prevent introduction of pollutants prior to discharge to the MS4 and receiving water.</p> <p>Fountain water must be dechlorinated or debrominated using holding time, aeration, and/or sodium thiosulfate. Chlorine residual in the discharge shall not exceed 0.1 mg/L.</p> <p>Fountain discharges are to be pH adjusted, if necessary, and be within the range of 6.5 and 8.5 standard units.</p> <p>Fountain discharges shall be volumetrically and velocity controlled to promote evaporation and/or infiltration.</p> <p>Ensure procedures for advanced notification by the fountain owner to the Permittee(s) at least 72 hours prior to planned discharge for discharges of 100,000 gallons or more.</p> <p><u>For discharges of 100,000 gallons or more, immediately-immediately</u> prior to discharge, the discharge pathway and the MS4 inlet to which the discharge is directed, shall be inspected and cleaned out.</p>
<p>Non-commercial car</p>	<p>Discharges allowed</p>	<p>Implement BMPs and ensure discharge avoids potential sources of pollutants in the flow path to</p>

¹⁹ Applicable mineral water quality objectives for surface waters are contained in Chapter 3 of the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties.

<p>washing by residents or by non-profit organizations</p>	<p>after implementation of specified BMPs.</p>	<p>prevent introduction of pollutants prior to discharge to the MS4 and receiving water.</p> <p>Minimize the amount of water used by employing water conservation practices such as turning off nozzles or kinking the hose when not spraying a car, and using a low volume pressure washer.</p> <p>Encourage use of biodegradable, phosphate free detergents and non-toxic cleaning products.</p> <p>Where possible, wash cars on a permeable surface where wash water can percolate into the ground (e.g. gravel or grassy areas).</p> <p>Empty buckets of soapy or rinse water into the sanitary sewer system (e.g., sinks or toilets).</p>
<p>Street/sidewalk wash water</p>	<p>Discharges allowed after implementation of specified BMPs.</p>	<p>Sweeping should be used as an alternate BMP whenever possible and sweepings should be disposed of in the trash.</p> <p>BMPs shall be in accordance with Regional Water Board Resolution No. 98-08 that requires: 1) removal of trash, debris, and free standing oil/grease spills/leaks (use absorbent material if necessary) from the area before washing and 2) use of high pressure, low volume spray washing using only potable water with no cleaning agents at an average usage of 0.006 gallons per square feet of sidewalk area. In areas of unsanitary conditions (e.g., areas where the congregation of transient populations can reasonably be expected to result in a significant threat to water quality), whenever practicable, Permittees shall collect and divert street and alley wash water from the Permittee's street and sidewalk cleaning public agency activities to the sanitary sewer.</p>

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IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**A. Effluent Limitations**

1. **Technology Based Effluent Limitations:** Each Permittee shall reduce pollutants in storm water discharges from the MS4 to the maximum extent practicable (MEP).
2. **Water Quality-Based Effluent Limitations (WQBELs).** This Order establishes WQBELs consistent with the assumptions and requirements of all available TMDL waste load allocations assigned to discharges from the Permittees' MS4s.
 - a. Each Permittee shall comply with applicable WQBELs as set forth in Part VI.E of this Order, pursuant to applicable compliance schedules.

B. Land Discharge Specifications – Not Applicable**C. Reclamation Specifications – Not Applicable****V. RECEIVING WATER LIMITATIONS****A. Receiving Water Limitations**

1. Discharges from the MS4 that cause or contribute to the violation of receiving water limitations are prohibited.
2. Discharges from the MS4 of storm water, or non-storm water, for which a Permittee is responsible²⁰, shall not cause or contribute to a condition of nuisance.
3. The Permittees shall comply with Parts V.A.1 and V.A.2 through timely implementation of control measures and other actions to reduce pollutants in the discharges in accordance with the storm water management program and its components and other requirements of this Order including any modifications. The storm water management program and its components shall be designed to achieve compliance with receiving water limitations. If exceedances of receiving water limitations persist, notwithstanding implementation of the storm water management program and its components and other requirements of this Order, the Permittee shall assure compliance with discharge prohibitions and receiving water limitations by complying with the following procedure:
 - a. Upon a determination by either the Permittee or the Regional Water Board that discharges from the MS4 are causing or contributing to an exceedance of an applicable Receiving Water Limitation, the Permittee shall promptly notify²¹ and thereafter submit an Integrated Monitoring Compliance Report (as described in the Program Reporting Requirements, Part XVIII.A.5 of the Monitoring and Reporting Program) to the Regional Water Board for approval. The Integrated

²⁰ Pursuant to 40 CFR § 122.26(a)(3)(vi), a Permittee is only responsible for discharges of storm water and non-storm water from the MS4 for which it is an owner or operator.

²¹ ~~Within 30 days of receipt of analytical results from the sampling event.~~

- Monitoring Compliance shall describe the BMPs that are currently being implemented by the Permittee and additional BMPs, including modifications to current BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the exceedances of receiving water limitations. The Integrated Monitoring Compliance Report shall include an implementation schedule. This Integrated Monitoring Compliance Report shall be incorporated in the annual Storm Water Report unless the Regional Water Board directs an earlier submittal. The Regional Water Board may require modifications to the Integrated Monitoring Compliance Report.
- b. The Permittee shall submit any modifications to the Integrated Monitoring Compliance Report required by the Regional Water Board within 30 days of notification.
 - c. Within 30 days following the Regional Water Board Executive Officer's approval of the Integrated Monitoring Compliance Report, the Permittee shall revise the storm water management program and its components and monitoring program to incorporate the approved modified BMPs that have been and will be implemented, an implementation schedule, and any additional monitoring required.
 - d. The Permittee shall implement the revised storm water management program and its components and monitoring program according to the approved implementation schedule.
4. So long as the Permittee has complied with the procedures set forth in Part V.A.3. above and is implementing the revised storm water management program and its components, the Permittee does not have to repeat the same procedure for continuing or recurring exceedances of the same receiving water limitations unless directed by the Regional Water Board to modify current BMPs or develop additional BMPs.

B. Ground Water Limitations – Not Applicable

VI. PROVISIONS

A. Standard Provisions

1. **Federal Standard Provisions.** Each Permittee shall comply with all Standard Provisions included in Attachment D of this Order, in accordance with 40 CFR sections 122.41 and 122.42.
2. **Legal Authority**
 - a. Each Permittee must establish and maintain adequate legal authority, within its respective jurisdiction, to control pollutant discharges into and from its MS4 through ordinance, statute, permit, contract or similar means. This legal authority must, at a minimum, authorize or enable the Permittee to:

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- i.** Control the contribution of pollutants to its MS4 from storm water discharges associated with industrial and construction activity and control the quality of storm water discharged from industrial and construction sites. This requirement applies both to industrial and construction sites with coverage under an NPDES permit, as well as to those sites that do not have coverage under an NPDES permit.
- ii.** Prohibit all non-storm water discharges through the MS4 to receiving waters not otherwise authorized or conditionally exempt pursuant to Part III.A;
- iii.** Prohibit and eliminate illicit discharges and illicit connections to the MS4;
- iv.** Control the discharge of spills, dumping, or disposal of materials other than storm water to its MS4;
- v.** Require compliance with conditions in Permittee ordinances, permits, contracts or orders (i.e., hold dischargers to its MS4 accountable for their contributions of pollutants and flows);
- vi.** Utilize enforcement mechanisms to require compliance with applicable ordinances, permits, contracts, or orders;
- vii.** Control the contribution of pollutants from one portion of the shared MS4 to another portion of the MS4 through interagency agreements among Co-permittees;
- viii.** Control of the contribution of pollutants from one portion of the shared MS4 to another portion of the MS4 through interagency agreements with other owners of the MS4 such as the State of California Department of Transportation;
- ix.** Carry out all inspections, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with applicable municipal ordinances, permits, contracts and orders, and with the provisions of this Order, including the prohibition of non-storm water discharges into the MS4 and receiving waters. This means the Permittee must have authority to enter, monitor, inspect, take measurements, review and copy records, and require regular reports from entities discharging into its MS4;
- x.** Require the use of control measures to prevent or reduce the discharge of pollutants to achieve water quality standards/receiving water limitations;
- xi.** Require that structural BMPs are properly operated and maintained; and
- xii.** Require documentation on the operation and maintenance of structural BMPs and their effectiveness in reducing the discharge of pollutants to the MS4.

- b.** Each Permittee must submit a statement certified by its chief legal counsel that the Permittee has the legal authority within its jurisdiction to implement and enforce each of the requirements contained in 40 CFR § 122.26(d)(2)(i)(A-F) and this Order. Each Permittee shall submit this certification annually as part of its Annual Report beginning with the first Annual Report required under this Order. These statements must include:
- i.** Citation of applicable municipal ordinances or other appropriate legal authorities and their relationship to the requirements of 40 CFR § 122.26(d)(2)(i)(A)-(F) and of this Order; and
 - ii.** Identification of the local administrative and legal procedures available to mandate compliance with applicable municipal ordinances identified in subsection (i) above and therefore with the conditions of this Order, and a statement as to whether enforcement actions can be completed administratively or whether they must be commenced and completed in the judicial system.

3. Fiscal Resources

- a.** Each Permittee shall conduct a fiscal analysis of the annual capital and operation and maintenance expenditures necessary to implement the requirements of this Order.
- b.** Each Permittee shall also enumerate and describe in its Annual Report the source(s) of funds used in the past year, and proposed for the coming year, to meet necessary expenditures on the Permittee's storm water management program.

4. Responsibilities of the Permittees

- a.** Each Permittee is required to comply with the requirements of this Order applicable to discharges within its boundaries. Permittees are not responsible for the implementation of the provisions applicable to other Permittees. Each Permittee shall:
 - i.** Comply with the requirements of this Order and any modifications thereto.
 - ii.** Coordinate among its internal departments and agencies, as necessary, to facilitate the implementation of the requirements of this Order applicable to such Permittees in an efficient and cost-effective manner.
 - iii.** Participate in intra-agency coordination (e.g. Planning Department, Fire Department, Building and Safety, Code Enforcement, Public Health, Parks and Recreation, and others) and inter-agency coordination (e.g. co-

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Permittees, other NPDES permittees) necessary to successfully implement the provisions of this Order.

5. Public Review

- a. All documents submitted to the Regional Water Board in compliance with the terms and conditions of this Order shall be made available to members of the public pursuant to the Freedom of Information Act (5 U.S.C. § 552 (as amended)) and the Public Records Act (Cal. Government Code § 6250 et seq.).
- b. All documents submitted to the Regional Water Board Executive Officer for approval shall be made available to the public for a 30-day period to allow for public comment.

6. Regional Water Board Review

Any formal determination or approval made by the Regional Water Board Executive Officer pursuant to the provisions of this Order may be reviewed by the Regional Water Board. A Permittee(s) or a member of the public may request such review upon petition within 30 days of the effective date of the notification of such decision to the Permittee(s) and interested parties on file at the Regional Water Board.

7. Reopener and Modification

- a. This Order may be modified, revoked, reissued, or terminated in accordance with the provisions of 40 CFR sections 122.44, 122.62, 122.63, 122.64, 124.5, 125.62, and 125.64. Causes for taking such actions include, but are not limited to:
 - i. Endangerment to human health or the environment resulting from the permitted activity, including information that the discharge(s) regulated by this Order may have the potential to cause or contribute to adverse impacts on water quality and/or beneficial uses;
 - ii. Acquisition of newly-obtained information that would have justified the application of different conditions if known at the time of Order adoption;
 - iii. To address changed conditions identified in required reports or other sources deemed significant by the Regional Water Board;
 - iv. To incorporate provisions as a result of future amendments to the Basin Plan, such as a new or revised water quality objective or the adoption or reconsideration of a TMDL, including the program of implementation. Within 18 months of the effective date of a revised TMDL or as soon as practicable thereafter, where the revisions warrant a change to the provisions of this Order, the Regional Water Board may modify this Order consistent with the

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assumptions and requirements of the revised WLA(s), including the program of implementation;

- v. To incorporate provisions as a result of new or amended statewide water quality control plans or policies adopted by the State Water Board, or in consideration of any State Water Board action regarding the precedential language of State Water Board Order WQ 99-05;
 - vi. To incorporate provisions as a result of the promulgation of new or amended federal or state laws or regulations, USEPA guidance concerning regulated activities, or judicial decisions that becomes effective after adoption of this Order.
 - vii. To incorporate effluent limitations for toxic constituents determined to be present in significant amount in the discharge through a more comprehensive monitoring program included as part of this Order and based on the results of the reasonable potential analysis;
 - viii. In accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include requirements for the implementation of the watershed management approach or to include new Minimum Levels (MLs); and/or
 - ix. To include provisions or modifications to WQBELs in Part VI.E and Attachments L-R in this Order prior to the final compliance deadlines, if practicable, that would allow an action-based, BMP compliance demonstration approach with regard to final WQBELs for storm water discharges. Such modifications shall be based on the Regional Water Board's evaluation of whether Watershed Management Programs in Part VI.C. have resulted in attainment of interim WQBELs for storm water and review of relevant research, including but not limited to data and information provided by Permittees and other stakeholders, on storm water quality and the efficacy and reliability of storm water control technologies. Provisions or modifications to WQBELs in Part VI.E. shall only be included in this Order where there is evidence that storm water control technologies can reliably achieve final WQBELs.
- b. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
- i. Violation of any term or condition contained in this Order;
 - ii. Obtaining this Order by misrepresentation, or failure to disclose all relevant facts; or
 - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

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- c. The filing of a request by a Permittee for a modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.
- d. This Order may be modified to make corrections or allowances for changes in the permitted activity, following the procedures at 40 CFR section 122.63, if processed as a minor modification. Minor modifications may only:
 - i. Correct typographical errors; or
 - ii. Require more frequent monitoring or reporting by a Permittee.
- 8. Any discharge of waste to any point(s) other than specifically described in this Order is prohibited, and constitutes a violation of this Order.
- 9. A copy of this Order shall be maintained by each Permittee so as to be available during normal business hours to Permittee employees responsible for implementation of the provisions of this Order and members of the public.
- 10. The discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act to any waste stream that may ultimately be released to waters of the United States, is prohibited, unless specifically authorized elsewhere in this Order or another NPDES permit. This requirement is not applicable to products used for lawn and agricultural purposes.
- ~~11. The discharge of any waste resulting from the combustion of toxic or hazardous wastes to any waste stream that ultimately discharges to waters of the United States is prohibited, unless specifically authorized elsewhere in this Order.~~
- ~~12.~~11. Oil or oily material, chemicals, refuse, or other pollutionable materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried off of the property and/or discharged to surface waters. Any such spill of such materials shall be contained and removed immediately.
- ~~13.~~12. If there is any storage of hazardous or toxic materials or hydrocarbons at a facility owned and/or operated by a Permittee and if the facility is not manned at all times, a 24-hour emergency response telephone number shall be prominently posted where it can easily be read from the outside.
- ~~14.~~13. **Enforcement**
 - a. Violation of any of the provisions of this Order may subject the violator to any of the penalties described herein or in Attachment D of this Order, or any combination thereof, at the discretion of the prosecuting authority; except that only one kind of penalty may be applied for each kind of violation.
 - b. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges through the MS4 to

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- receiving waters, may subject a Permittee to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject a Permittee to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.
- c. The California Water Code provides that any person who violates a waste discharge requirement or a provision of the California Water Code is subject to civil penalties of up to \$5,000 per day, \$10,000 per day, or \$25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to \$10 per gallon per day or \$25 per gallon per day of violation; or some combination thereof, depending on the violation, or upon the combination of violations.
 - d. California Water Code section 13385(h)(1) requires the Regional Water Board to assess a mandatory minimum penalty of three-thousand dollars (\$3,000) for each serious violation. Pursuant to California Water Code section 13385(h)(2), a “serious violation” is defined as any waste discharge that violates the effluent limitations contained in the applicable waste discharge requirements for a Group II pollutant by 20 percent or more, or for a Group I pollutant by 40 percent or more. Appendix A of 40 CFR section 123.45 specifies the Group I and II pollutants. Pursuant to California Water Code section 13385.1(a)(1), a “serious violation” is also defined as “a failure to file a discharge monitoring report required pursuant to Section 13383 for each complete period of 30 days following the deadline for submitting the report, if the report is designed to ensure compliance with limitations contained in waste discharge requirements that contain effluent limitations.”
 - e. California Water Code section 13385(i) requires the Regional Water Board to assess a mandatory minimum penalty of three-thousand dollars (\$3,000) for each violation whenever a person violates a waste discharge requirement effluent limitation in any period of six consecutive months, except that the requirement to assess the mandatory minimum penalty shall not be applicable to the first three violations within that time period.
 - f. Pursuant to California Water Code section 13385.1(d), for the purposes of section 13385.1 and subdivisions (h), (i), and (j) of section 13385, “effluent limitation” means a numeric restriction or a numerically expressed narrative restriction, on the quantity, discharge rate, concentration, or toxicity units of a pollutant or pollutants that may be discharged from an authorized location. An effluent limitation may be final or interim, and may be expressed as a prohibition. An effluent limitation, for these purposes, does not include a receiving water limitation, a compliance schedule, or a best management practice.
 - g. Unlike subdivision (c) of California Water Code section 13385, where violations of effluent limitations may be assessed administrative civil liability on a per day basis, the mandatory minimum penalties provisions identified above require the Regional Water Board to assess mandatory minimum penalties for “each

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violation” of an effluent limitation. Some water quality-based effluent limitations in Attachments L through R of this Order (e.g., trash, as described immediately below) are expressed as annual effluent limitations. Therefore, for such limitations, there can be no more than one violation of each interim or final effluent limitation per year.

h. Trash TMDLs.

- i. Consistent with the 2009 amendments to Order No. 01-182 to incorporate the Los Angeles River Trash TMDL, the water quality-based effluent limitations in Attachments L through R of this Order for trash are expressed as annual effluent limitations. Therefore, for such limitations, there can be no more than one violation of each interim or final effluent limitation per year. Trash is considered a Group I pollutant, as specified in Appendix A to 40 CFR section 123.45. Therefore, each annual violation of a trash effluent limitation in Attachments L through R of this Order by forty percent or more would be considered a “serious violation” under California Water Code section 13385(h). With respect to the final effluent limitation of zero trash, any detectable discharge of trash necessarily is a serious violation, in accordance with the State Water Board’s Enforcement Policy. Violations of the effluent limitations in Attachments L through R of this Order would not constitute “chronic” violations that would give rise to mandatory liability under California Water Code section 13385(i) because four or more violations of the effluent limitations subject to a mandatory penalty cannot occur in a period of six consecutive months.
- ii. For the purposes of enforcement under California Water Code section 13385, subdivisions (a), (b), and (c), not every storm event may result in trash discharges. In trash TMDLs adopted by the Regional Water Board, the Regional Water Board states that improperly deposited trash is mobilized during storm events of greater than 0.25 inches of precipitation. Therefore, violations of the effluent limitations are limited to the days of a storm event of greater than 0.25 inches. Once a Permittee has violated the annual effluent limitation, any subsequent discharges of trash during any day of a storm event of greater than 0.25 inches during the same storm year constitutes an additional “day in which the violation [of the effluent limitation] occurs”.

15-14. This Order does not exempt any Permittee from compliance with any other laws, regulations, or ordinances that may be applicable.

16-15. The provisions of this Order are severable. If any provisions of this Order or the application of any provision of this Order to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this Order shall not be affected.

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B. Monitoring and Reporting Program (MRP) Requirements

Dischargers shall comply with the MRP and future revisions thereto, in Attachment E of this Order or may, in coordination with an approved Watershed Management Program per Part VI.C, implement a customized monitoring program that achieves the five Primary Objectives set forth in Part II.A. of Attachment E and includes the elements set forth in Part II.E. of Attachment E.

C. Watershed Management Programs**1. General**

- a. The purpose of this Part VI.C is to allow Permittees the flexibility to develop Watershed Management Programs to implement the requirements of this Order on a watershed scale through customized strategies, control measures, and BMPs.
- b. Participation in a Watershed Management Program is voluntary and allows a Permittee to address the highest watershed priorities, including complying with the requirements of Part V.A. (Receiving Water Limitations), Part VI.E (Total Maximum Daily Load Provisions) and Attachments L through R, by customizing the control measures in Parts III.A.4 (Prohibitions – Non-Storm Water Discharges) and VI.D (Minimum Control Measures).
- c. Customized strategies, control measures, and BMPs shall be implemented on a watershed basis, where applicable, through each Permittee's storm water management program and/or collectively by all participating Permittees through a Watershed Management Program.
- d. The Watershed Management Programs shall ensure that discharges from the Permittee's MS4s: (i) achieve applicable water quality-based effluent limitations in Part VI.E and Attachments L through R pursuant to the corresponding compliance schedules, (ii) do not cause or contribute to exceedances of receiving water limitations in Parts V.A and VI.E and Attachments L through R, and (iii) do not include non-storm water discharges that are effectively prohibited pursuant to Part III.A. The programs shall also ensure that controls are implemented to reduce the discharge of pollutants to the maximum extent practicable (MEP) pursuant to Part IV.A.1.
- e. Watershed Management Programs shall be developed either collaboratively or individually using the Regional Water Board's Watershed Management Areas (WMAs). Where appropriate, WMAs may be separated into subwatersheds to focus water quality prioritization and implementation efforts by receiving water.
- f. Each Watershed Management Program shall be consistent with Part VI.C.5-C.8 and shall:

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- i. Prioritize water quality issues resulting from storm water and non-storm water discharges from the MS4 to receiving waters within each WMA,
- ii. Identify and implement strategies, control measures, and BMPs to achieve the outcomes specified in Part VI.C.1.d,
- iii. Execute an integrated monitoring program and assessment program pursuant to Attachment E – MRP, Part IV to determine progress towards achieving applicable limitations and/or action levels in Attachment G, and
- iv. Modify strategies, control measures, and BMPs as necessary based on analysis of monitoring data collected pursuant to the MRP to ensure that applicable water quality-based effluent limitations and receiving water limitations and other milestones set forth in the Watershed Management Program will be achieved in the required timeframes.
- iv-v. Provide appropriate opportunity for meaningful stakeholder input, including but not limited to, a permit-wide watershed management program technical advisory committee (TAC) that will advise and participate in the development of the Watershed Management Programs and enhanced Watershed Management Programs from month 6 through the date of program approval. The composition of the TAC may include at least one Permittee representative from each Watershed Management Area for which a Watershed Management Program will be developed, and must include a minimum of one public representative from a non-governmental organization with public membership, and staff from the Regional Water Board and USEPA Region IX.
- g. Permittees may elect to develop an enhanced Watershed Management Program (EWMP). An ~~enhanced Watershed Management Program (EWMP)~~ is one that comprehensively evaluates opportunities, within the participating Permittees' collective jurisdictional area in a Watershed Management Area, for collaboration among Permittees and other partners on multi-benefit regional projects ~~to control MS4 discharges of storm water by that~~, wherever feasible, retaining (i) all non-storm water runoff and (ii) all storm water runoff from the 85th percentile, 24-hour storm event for the drainage areas tributary to the projects, while also achieving other benefits including flood control and water supply, among others. In drainage areas within the EWMP area ~~Where where~~ retention of the 85th percentile, 24-hour storm event is not feasible, the ~~enhanced Watershed Management Program~~ EWMP shall include a Reasonable Assurance Analysis to demonstrate that applicable water quality based effluent limitations and receiving water limitations shall be achieved through implementation of other watershed control measures. An ~~enhanced Watershed Management Program~~ EWMP shall:
- i. Be consistent with the provisions in Part VI.C.1.a-f and VI.C.5-C.8;

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- ii. Incorporate applicable State agency input on priority setting and other key implementation issues;
- iii. Provide for meeting water quality standards and other CWA obligations by utilizing provisions in the CWA and its implementing regulations, policies and guidance;
- ~~iv. Include multi-benefit regional projects to ensure that MS4 discharges achieve compliance with all final WQBELs set forth in Part VI.E. and do not cause or contribute to exceedances of receiving water limitations in Part V.A. by Maximize retention-retaining~~ through infiltration or capture and reuse of the storm water volume from the 85th percentile, 24-hour storm ~~within-for~~ the ~~drainage areas tributary to the multi-benefit regional projects, covered by the enhanced Watershed Management Program;~~
- ~~iv.v. In drainage areas where retention of the storm water volume from the 85th percentile, 24-hour event is not technically feasible, include other watershed control measures to ensure that MS4 discharges achieve compliance with all interim and final WQBELs set forth in Part VI.E. with compliance deadlines occurring after approval of a EWMP and to ensure that MS4 discharges do not cause or contribute to exceedances of receiving water limitations in Part V.A.;~~
- ~~v.vi. Maximize the effectiveness of funds through analysis of alternatives and the selection and sequencing of actions needed to address human health and water quality related challenges and non-compliance;~~
- ~~vi.vii. Incorporate effective innovative technologies, approaches and practices, including green infrastructure;~~
- ~~vii.viii. Ensure that existing requirements to comply with technology-based effluent limitations and core requirements (e.g., including elimination of non-storm water discharges of pollutants through the MS4, and controls to reduce the discharge of pollutants in storm water to the maximum extent practicable) are not delayed;~~
- ~~viii.—Ensure that a financial strategy is in place; and,~~

~~Provide appropriate opportunity for meaningful stakeholder input throughout the development of the enhanced Watershed Management Program, including the formation of a Technical Advisory Committee (TAC) that will advise and participate in the development of the enhanced Watershed Management Programs from month 6 through the date of program approval. The composition of the TAC may include at least one Permittee representative from each Watershed Management Area for which an enhanced Watershed Management Program will be developed and a minimum of one public representative from a non-governmental organization with public membership.~~

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2. Compliance with Receiving Water Limitations Not Otherwise Addressed by a TMDL through a WMP or EWMP

a. For receiving water limitations in Part V.A. associated with water body-pollutant combinations not addressed through a TMDL, but which a Permittee elects to address through a Watershed Management Program or ~~enhanced Watershed Management Program~~ EWMP as set forth in this Part VI.C., a Permittee shall comply as follows:

i. For pollutants that are in the same class²² as those addressed in a TMDL for the watershed and for which the water body is identified as impaired on the State’s Clean Water Act Section 303(d) List as of the effective date of this Order:

- (1) Permittees shall demonstrate that the Watershed Control Measures to achieve the applicable TMDL provisions identified pursuant to Part VI.C.5.b.iv.(3) will also adequately address contributions of the pollutant(s) within the same class from MS4 discharges to receiving waters, consistent with the assumptions and requirements of the corresponding TMDL provisions, including interim and final requirements and deadlines for their achievement, such that the MS4 discharges of the pollutant(s) will not cause or contribute to exceedances of receiving water limitations in Part V.A.
- (2) Permittees shall include the water body-pollutant combination(s) in the Reasonable Assurance Analysis in Part VI.C.5.b.iv.(5).
- (3) Permittees shall identify milestones and dates for their achievement consistent with those in the corresponding TMDL.

ii. For pollutants that are not in the same class as those addressed in a TMDL for the watershed, but for which the water body is identified as impaired on the State’s Clean Water Act Section 303(d) List as of the effective date of this Order:

- (1) Permittees shall assess contributions of the pollutant(s) from MS4 discharges to the receiving waters and sources of the pollutant(s) within the drainage area of the MS4 pursuant to Part VI.C.5.a.iii.
- (2) Permittees shall identify Watershed Control Measures pursuant to Part VI.C.5.b. that will adequately address contributions of the pollutant(s) from MS4 discharges to receiving waters such that the MS4 discharges of the pollutant(s) will not cause or contribute to exceedances of receiving water limitations in Part V.A.
- (3) Permittees shall include the water body-pollutant in the Reasonable Assurance Analysis in Part VI.C.5.b.iv.(5).
- (4) Permittees shall identify enforceable requirements and milestones and dates for their achievement to control MS4 discharges such

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²² Pollutants are considered in a similar class if they have similar fate and transport mechanisms, can be addressed via the same types of control measures, and within the same timeline already contemplated as part of the Watershed Management Program for the TMDL.

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that they do not cause or contribute to exceedances of receiving water limitations within a timeframe(s) that is as short as possible, taking into account the technological, operation, and economic factors that affect the design, development, and implementation of the control measures that are necessary. The time between dates shall not exceed one year. Milestones shall relate to a specific water quality endpoint (e.g., x% of the MS4 drainage area is meeting the receiving water limitations) and dates shall relate either to taking a specific action or meeting a milestone.

(5) Where the final date(s) in (4) is beyond the term of this Order, the following conditions shall apply:

(a) For an EWMP, in drainage areas where retention of (i) all non-storm water runoff and (ii) all storm water runoff from the 85th percentile, 24-hour storm event will be achieved, each participating Permittee shall continue to target implementation of watershed control measures in its existing storm water management program, including watershed control measures to eliminate non-storm water discharges that are a source of pollutants to receiving waters.

(a)(b) For a WMP and in areas of a EWMP where retention of the volume in (a) is technically infeasible and where the Regional Water Board determines that MS4 discharges cause or contribute to the water quality impairment, participating Permittees may initiate development of a stakeholder-proposed TMDL upon approval of the Watershed Management Program or EWMP. For MS4 discharges from these drainage areas to the receiving waters, any extension of this compliance mechanism beyond the term of this Order shall be consistent with the implementation schedule in a TMDL for the waterbody pollutant combination(s) adopted by the Regional Water Board.

iii. For pollutants for which there are exceedances of receiving water limitations in Part V.A., but for which the water body is not identified as impaired on the State’s Clean Water Act Section 303(d) List as of the effective date of this Order:

- (1) Upon an exceedance of a receiving water limitation, based on data collected pursuant to the MRP and approved IMPs and CIMPs, Permittees shall assess contributions of the pollutant(s) from MS4 discharges to the receiving waters and sources of the pollutant(s) within the drainage area of the MS4 pursuant to Part VI.C.5.a.iii.
- (2) If MS4 discharges are identified as a source of the pollutant(s) that has caused or contributed to, or has the potential to cause or contribute to, the exceedance(s) of receiving water limitations in

Part V.A., Permittees shall address contributions of the pollutant(s) from MS4 discharges through modifications to the WMP or ~~Integrated Program~~EWMP pursuant to Part VI.C.8.a.ii.

(a) In a modified WMP or EWMP, Permittees shall identify Watershed Control Measures pursuant to Part VI.C.5.b. that will adequately address contributions of the pollutant(s) from MS4 discharges to receiving waters such that the MS4 discharges of the pollutant(s) will not cause or contribute to exceedances of receiving water limitations in Part V.A.

(b) Permittees shall modify the Reasonable Assurance Analysis pursuant to Part VI.C.5.b.iv.(5) to address the pollutant(s).

(c) Permittees shall identify enforceable requirements and milestones and dates for their achievement to control MS4 discharges such that they do not cause or contribute to exceedances of receiving water limitations to address the pollutant(s) within a timeframe(s) that is as short as possible, taking into account the technological, operation, and economic factors that affect the design, development, and implementation of the control measures that are necessary. The time between dates shall not exceed one year. Milestones shall relate to a specific water quality endpoint (e.g., x% of the MS4 drainage area is meeting the receiving water limitations) and dates shall relate either to taking a specific action or meeting a milestone.

(d) Where the final date(s) in (4) is beyond the term of this Order, the following conditions shall apply:

(i) For an EWMP, in drainage areas where retention of (i) all non-storm water runoff and (ii) all storm water runoff from the 85th percentile, 24-hour storm event will be achieved, each participating Permittee shall continue to ~~optimize~~target implementation of watershed control measures in its existing storm water management program, including watershed control measures to eliminate non-storm water discharges that are a source of pollutants to receiving waters.

(ii) For a WMP and in areas of a EWMP where retention of the volume in (a) is technically infeasible, for newly identified exceedances of receiving water limitations, a Permittee may request that the Regional Water Board approve a modification to its WMP or EWMP to include these additional water body-pollutant combinations.

b. A Permittee’s full compliance with all requirements and dates for their achievement in an approved Watershed Management Program or

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~~enhanced Watershed Management Program~~EWMP shall constitute a Permittee's compliance with the receiving water limitations provisions in Part V.A. of this Order for the specific water body-pollutant combinations addressed by an approved Watershed Management Program or ~~enhanced Watershed Management Program~~EWMP.

c. If a Permittee fails to meet any requirement or date for its achievement in an approved Watershed Management Program or ~~enhanced Watershed Management Program~~EWMP, the Permittee shall be subject to the provisions of Part V.A. for the waterbody-pollutant combination(s) that were to be addressed by the requirement.

d. Upon notification of a Permittee's intent to develop a WMP or EWMP and prior to approval of its WMP or EWMP, a Permittee's full compliance with all of the following requirements shall constitute a Permittee's compliance with the receiving water limitations provisions in Part V.A. not otherwise addressed by a TMDL, if all the following requirements are met:

- i. Provides timely notice of its intent to develop a WMP or EWMP,
- ii. Meets all interim and final deadlines for development of a WMP or EWMP,
- iii. For the area to be covered by the WMP or EWMP, targets implementation of watershed control measures in its existing storm water management program, including watershed control measures to eliminate non-storm water discharges of pollutants through the MS4 to receiving waters, to address known contributions of pollutants from MS4 discharges that cause or contribute to exceedances of receiving water limitations, and
- iv. Receives final approval of its WMP or EWMP within 28 or 40 months, respectively.

3. Compliance with Receiving Water Limitations Addressed by a TMDL through a WMP or EWMP

a. A Permittee's full compliance with all requirements and dates for their achievement in an approved Watershed Management Program or ~~enhanced Watershed Management Program~~EWMP shall constitute a Permittee's compliance with provisions pertaining to applicable interim water quality based effluent limitations and interim receiving water limitations ~~pursuant to in~~ Part VI.E. and Attachments L-R for the pollutant(s) addressed by the approved Watershed Management Program or EWMP.

b. Upon notification of a Permittee's intent to develop a WMP or EWMP and prior to approval of its WMP or EWMP, a Permittee's full compliance with

all of the following requirements shall constitute a Permittee’s compliance with the receiving water limitations provisions in Part V.A., if all the following requirements are met:

- i. Provides timely notice of its intent to develop a WMP or EWMP,
 - ii. Meets all interim and final deadlines for development of a WMP or EWMP,
 - iii. For the area to be covered by the WMP or EWMP, targets implementation of watershed control measures in its existing storm water management program, including watershed control measures to eliminate non-storm water discharges of pollutants through the MS4 to receiving waters, to address known contributions of pollutants from MS4 discharges that cause or contribute to exceedances of receiving water limitations, and
 - iv. Receives final approval of its WMP or EWMP within 28 or 40 months, respectively.
- a-c. Subdivision b. does not apply to receiving water limitations corresponding to final compliance deadlines pursuant to TMDL provisions in Part VI.E. that have passed or will occur prior to approval of a WMP or EWMP.

4. Process

- a. Timelines for Implementation
 - i. ~~Each Permittee shall ensure~~ implementation of the following requirements shall occur per the schedule specified in Table 9 below:

Table 9. Watershed Management Program Implementation Requirements

Part	Provision	Due Date
VI.C.4.b	Notify Regional Water Board of intent to develop Watershed Management Program or enhanced WMP and request submittal date for draft program plan	6 months after Order effective date
VI.C.4.c	For Permittee(s) that elect not to implement the conditions of Part VI.C.4.c.i or c.ii, submit draft plan to Regional Water Board Executive Officer	1 year after Order effective date

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VI.C.4.c	For Permittee(s) that elect to implement the conditions of Part VI.C.4.c.i or c.ii, submit draft plan to Regional Water Board Executive Officer	18 months after Order effective date
VI.C.4.c.iv	For Permittees that elect to collaborate on an enhanced WMP that meets the requirements of Part VI.C.4.c.iv, submit draft plan to Regional Water Board Executive Officer	18 months after Order effective date, provide final work plan for development of enhanced WMP, including early actions to achieve all interim and final water quality based effluent limitations and receiving water limitations pursuant to Part VI.E. and applicable Attachments with deadlines occurring prior to program approval 30 months after Order effective date, submit draft plan
<u>VI.C.4.c</u>	<u>Comments provided to Permittees by Regional Water Board staff</u>	<u>4 months after submittal of draft plan</u>
VI.C.4.c	Submit final plan to Regional Water Board Executive Officer	3 months after receipt of Regional Water Board comments on draft plan
<u>VI.C.4.c</u>	<u>Approval or denial of final plan by Regional Water Board or by the Executive Officer on behalf of the Regional Water Board</u>	<u>3 months after submittal of final plan</u>
VI.C.6	Begin implementation of Watershed Management Program <u>or EWMP</u>	Upon approval of final plan by Regional Water Board Executive Officer
VI.C.8	Comprehensive evaluation of Watershed Management Program <u>or EWMP</u> and submittal of modifications to plan	Every two years from date of approval

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- b. Permittees that elect to develop a Watershed Management Program or EWMP must notify the Regional Water Board no later than six months after the effective date of this Order.
- i. Such notification shall specify if the Permittee(s) are requesting a 12-month or 18-month submittal date for the draft Watershed Management Program, per Part VI.C.4.c.i – ii, or if the Permittees are requesting a 18/30-month submittal date for the draft ~~enhanced Watershed Management Program~~EWMP per Part VI.C.4.c.iv.
 - ii. As part of their notice of intent to develop a WMP or EWMP, Permittees shall identify all applicable ~~interim and final trash WQBELs and all other final water quality based effluent limitations WQBELs~~ and receiving water limitations pursuant to Part VI.E. and the applicable attachment(s) with compliance deadlines occurring prior to approval of a WMP or EWMP. Permittees shall identify watershed control measures, where possible from existing TMDL implementation plans, that will be implemented by participating Permittees concurrently with the development of a Watershed Management Program or EWMP to ensure that MS4 discharges achieve compliance with applicable interim and final trash WQBELs and all other final water quality based effluent limitations WQBELs and receiving water limitations set forth in Part VI.E. and the applicable attachment(s) by the applicable with-compliance deadlines occurring prior to approval of a WMP or EWMP.
 - iii. As part of their notification, Permittees electing to develop an ~~enhanced Watershed Management Program~~EWMP shall submit all of the following in addition to the requirements of Part VI.C.4.b.i.-ii.:
 - (1) Plan concept and geographical scope,
 - (2) Cost estimate for plan development,
 - (3) Executed MOU/agreement among participating Permittees to fund plan development, or final draft MOU among participating Permittees along with a signed letter of intent from each participating City Manager or head of agency. If a final draft MOU is submitted, the MOU shall be fully executed by all participating Permittees within 12 months of the effective date of this Order.
 - (4) Interim milestones for plan development and deadlines for their achievement,
 - (5) Identification of, and commitment to fully implement, one ~~multi-benefit regional pilot project structural BMP or a suite of BMPs at a scale that provides meaningful water quality improvement~~ within each watershed covered by the plan within 30 months of the effective date of this Order in addition to watershed control

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measures to be implemented pursuant to b.ii. above. The structural BMP or suite of BMPs shall be subject to approval by the Regional Water Board Executive Officer, and

- (6) Demonstration that the requirements in Parts VI.C.4.c.iv.(1) and (2) have been met.
- c. Permittees that elect to develop a Watershed Management Program shall submit a draft plan to the Regional Water Board ~~Executive Officer~~ as follows:
- i. For Permittees that elect to collaborate on the development of a Watershed Management Program, Permittees shall submit the draft Watershed Management Program no later than 18 months after the effective date of this Order if the following conditions are met in greater than 50% of the land area ~~in the watershed~~ covered by the WMP:
- (1) Demonstrate that there are LID ordinances in place and/or Commence-commence development of a Low Impact Development (LID) ordinance(s) meeting the requirements of this Order's Planning and Land Development Program within 60 days of the effective date of the Order and have a draft ordinance ~~the first reading before the Permittee's decision-making body~~ within 6 months of the effective date of the Order, and
 - (2) Demonstrate that there are green streets policies in place and/or Commence-commence development of a policy(ies) that specifies the use of green street strategies for transportation corridors within 60 days of the effective date of the Order and have a draft policy ~~the first reading before the Permittee's decision-making body~~ within 6 months of the effective date of the Order.
 - (3) Demonstrate in the notification of the intent to develop a Watershed Management Program that Parts VI.C.4.c.i(1) and (2) have been met in greater than 50% of the watershed area.
- ii. For a Permittees that elects to develop an individual Watershed Management Program, the Permittees shall submit the draft Watershed Management Program no later than 18 months after the effective date of this Order if the following conditions are met:
- (1) Demonstrate that there is a LID ordinance in place for the Permittee's jurisdiction and/or commenceCommence development of a Low Impact Development (LID) ordinance for the Permittee's jurisdiction meeting the requirements of this Order's Planning and Land Development Program within 60 days of the effective date of the Order and have a draft ordinance ~~the first reading before the Permittee's decision-making body~~ within 6 months of the effective date of the Order, and

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- (2) Demonstrate that there is a green streets policy in place for the Permittee's jurisdiction and/or commence development of a policy that specifies the use of green street strategies for transportation corridors within the Permittee's jurisdiction within 60 days of the effective date of the Order and have a draft policy the first reading before the Permittee's decision-making body within 6 months of the effective date of the Order.
- (3) Demonstrate in the notification of the intent to develop a Watershed Management Program that Parts VI.C.4.c.ii.(1) and (2) have been met.
- iii. For Permittees that elect not to implement the conditions under Part VI.C.4.c.i. or Part VI.C.4.c.ii., Permittees shall submit the draft Watershed Management Program no later than 12 months after the effective date of this Order.
- iv. For Permittees that elect to collaborate on the development of an enhanced Watershed Management Program EWMP, Permittees shall submit the work plan for development of the enhanced Watershed Management Program EWMP no later than 18 months after the effective date of this Order, and shall submit the draft program no later than 30 months after the effective date of this Order if the following conditions are met in greater than 50% of the land area in the watershed:
- (1) Demonstrate that there are LID ordinances in place and/or commence development of a Low Impact Development (LID) ordinance(s) meeting the requirements of this Order's Planning and Land Development Program within 60 days of the effective date of the Order and have a draft ordinance the first reading before the Permittee's decision-making body within 6 months of the effective date of the Order, and
- (2) Demonstrate that there are green streets policies in place and/or commence development of a policy(ies) that specifies the use of green street strategies for transportation corridors within 60 days of the effective date of the Order and have a draft policy the first reading before the Permittee's decision-making body within 6 months of the effective date of the Order.
- (3) Demonstrate in the notification of the intent to develop an enhanced Watershed Management Program EWMP that Parts VI.C.4.c.iv.(1) and (2) have been met in greater than 50% of the watershed area.
- d. Until the Watershed Management Program or EWMP is approved by the Regional Water Board or by the Executive Officer on behalf of the Regional Water Board, Permittees that elect to develop a Watershed Management Program or enhanced Watershed Management Program EWMP shall:

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- i. Continue to implement watershed control measures in their existing storm water management programs, including actions within each of the six categories of minimum control measures consistent with 40 CFR section 122.26(d)(2)(iv),
- ii. Continue to implement watershed control measures to eliminate non-storm water discharges through the MS4 that are a source of pollutants to receiving waters consistent with CWA section 402(p)(3)(B)(ii). and
- iii. Implement watershed control measures, where possible from existing TMDL implementation plans, sufficient to ensure that MS4 discharges to achieve compliance with interim and final trash WQBELs and all other final water quality-based effluent limitations WQBELs and receiving water limitations pursuant to Part VI.E. and set forth in Attachments L through R in satisfaction of by the applicable compliance deadlines occurring prior to program approval of a WMP or EWMP.
- e. Permittees that do not elect to develop a Watershed Management Program or EWMP, or that do not have an approved WMP or EWMP within 28 or 40 months, respectively, of the effective date of this Order, shall be subject to the baseline requirements in Part VI.D and shall demonstrate compliance with receiving water limitations pursuant to Part V.A. and with applicable interim water quality-based effluent limitations in Part VI.E pursuant to subparts VI.E.2.d.i.(1)-(3).
- f. Permittees subject to the Middle Santa Ana River Watershed Bacteria Indicator TMDL shall submit a Comprehensive Bacteria Reduction Plan (CBRP) for dry weather to the Regional Water Board Executive Officer no later than sixnine months after the effective date of this Order. The CBRP shall describe, in detail, the specific actions that have been taken or will be taken to achieve compliance with the dry weather water quality-based effluent limitations and the receiving water limitations for the Middle Santa Ana River Watershed Bacteria Indicator TMDL by December 31, 2015. The CBRP shall also establish a schedule for developing a CBRP to comply with the water quality-based effluent limitations and the receiving water limitations for the Middle Santa Ana River Bacteria TMDL during wet weather by December 31, 2025. The CBRP may be developed in lieu of the Watershed Management Program for MS4 discharges of bacteria within the Middle Santa Ana River Watershed.

5. Program Development

a. Identification of Water Quality Priorities

Permittees shall identify the water quality priorities within each WMA that will be addressed by the Watershed Management Program. At a minimum, these priorities shall include achieving applicable water quality-based effluent

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limitations and/or receiving water limitations established pursuant to TMDLs, as set forth in Part VI.E and Attachments L through R of this Order.

- i. **Water Quality Characterization.** Each plan shall include an evaluation of existing water quality conditions, including characterization of storm water and non-storm water discharges from the MS4 and receiving water quality, to support identification and prioritization/sequencing of management actions.
- ii. **Water Body-Pollutant Classification.** On the basis of the evaluation of existing water quality conditions, water body-pollutant combinations shall be classified into one of the following three categories:
 - (1) **Category 1 (Highest Priority):** Water body-pollutant combinations for which water quality-based effluent limitations and/or receiving water limitations are established in Part VI.E and Attachments L through R of this Order.
 - (2) **Category 2 (High Priority):** Pollutants for which data indicate water quality impairment in the receiving water according to the State's Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List (State Listing Policy) and for which MS4 discharges may be causing or contributing to the impairment.
 - (3) **Category 3 (Medium Priority):** Pollutants for which there are insufficient data to indicate water quality impairment in the receiving water according to the State's Listing Policy, but which exceed applicable receiving water limitations contained in this Order and for which MS4 discharges may be causing or contributing to the exceedance.
- iii. **Source Assessment.** Utilizing existing information, potential sources within the watershed for the water body-pollutant combinations in Categories 1 - 3 shall be identified.
 - (1) Permittees shall identify known and suspected storm water and non-storm water pollutant sources in discharges to the MS4 and from the MS4 to receiving waters and any other stressors related to MS4 discharges causing or contributing to the water quality priorities. The identification of known and suspected sources of the highest water quality priorities shall consider the following:
 - (a) Review of available data, including but not limited to:
 - (i) Findings from the Permittees' Illicit Connections and Illicit Discharge Elimination Programs;

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- (ii) Findings from the Permittees' Industrial/Commercial Facilities Programs;
 - (iii) Findings from the Permittees' Development Construction Programs;
 - (iv) Findings from the Permittees' Public Agency Activities Programs;
 - (v) TMDL source investigations;
 - (vi) Watershed model results;
 - (vii) Findings from the Permittees' monitoring programs, including but not limited to TMDL compliance monitoring and receiving water monitoring; and
 - (viii) Any other pertinent data, information, or studies related to pollutant sources and conditions that contribute to the highest water quality priorities.
- (b) Locations of the Permittees' MS4s, including, at a minimum, all MS4 major outfalls and major structural controls for storm water and non-storm water that discharge to receiving waters.
 - (c) Other known and suspected sources of pollutants in non-storm water or storm water discharges from the MS4 to receiving waters within the WMA.
- iv. Prioritization.** Based on the findings of the source assessment, the issues within each watershed shall be prioritized and sequenced. Watershed priorities shall include at a minimum:
- (1) TMDLs
 - (a) Controlling pollutants for which there are water quality-based effluent limitations and/or receiving water limitations with interim or final compliance deadlines within the permit term, or TMDL compliance deadlines that have already passed and limitations have not been achieved.
 - (b) Controlling pollutants for which there are water quality-based effluent limitations and/or receiving water limitations with interim or final compliance deadlines between September 6, 2012 and October 25, 2017.
 - (2) Other Receiving Water Considerations

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(a) Controlling pollutants for which data indicate impairment or exceedances of receiving water limitations in the receiving water and the findings from the source assessment implicates discharges from the MS4 shall be considered the second highest priority.

b. Selection of Watershed Control Measures

- i.** Permittees shall identify strategies, control measures, and BMPs to implement through their individual storm water management programs, and collectively on a watershed scale, with the goal of creating an efficient program to focus individual and collective resources on watershed priorities.
- ii.** The objectives of the Watershed Control Measures shall include:
 - (1) Prevent or eliminate non-storm water discharges to the MS4 that are a source of pollutants from the MS4 to receiving waters.
 - (2) Implement pollutant controls necessary to achieve all applicable interim and final water quality-based effluent limitations and/or receiving water limitations pursuant to corresponding compliance schedules.
 - (3) Ensure that discharges from the MS4 do not cause or contribute to exceedances of receiving water limitations.
- iii.** Watershed Control Measures may include:
 - (1) Structural and/or non-structural controls and operation and maintenance procedures that are designed to achieve applicable water quality-based effluent limitations, receiving water limitations in Part VI.E and/or Attachments L through R;
 - (2) Retrofitting areas of existing development known or suspected to contribute to the highest water quality priorities with regional or sub-regional controls or management measures; and
 - (3) Stream and/or habitat rehabilitation or restoration projects where stream and/or habitat rehabilitation or restoration are necessary for, or will contribute to demonstrable improvements in the physical, chemical, and biological receiving water conditions and restoration and/or protection of water quality standards in receiving waters.

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iv. The following provisions of this Order shall be incorporated as part of the Watershed Management Program:

- (1) Minimum Control Measures.
 - (a) Permittees shall assess the minimum control measures (MCMs) as defined in Part VI.D.4 to Part VI.D.10 of this Order to identify opportunities for focusing resources on the high priority issues in each watershed. For each of the following minimum control measures, Permittees shall identify potential modifications that will address watershed priorities:
 - (i) Development Construction Program
 - (ii) Industrial/Commercial Facilities Program
 - (iii) Illicit Connection and Illicit Discharges Detection and Elimination Program
 - (iv) Public Agency Activities Program
 - (v) Public Information and Participation Program
 - (b) At a minimum, the Watershed Management Program shall include management programs consistent with 40 CFR section 122.26(d)(2)(iv)(A)-(D).
 - (c) If the Permittee(s) elects to eliminate a control measure identified in Parts VI.D.4, VI.D.5, VI.D.6 and VI.D.8 to VI.D.10 because that specific control measure is not applicable to the Permittee(s), the Permittee(s) shall provide a justification for its elimination. The Planning and Land Development Program is not eligible for elimination.
 - (d) Such customized actions, once approved as part of the Watershed Management Program, shall replace in part or in whole the requirements in Parts VI.D.4, VI.D.5, VI.D.6 and VI.D.8 to VI.D.10 for participating Permittees.
- (2) Non-Storm Water Discharge Measures. Where Permittees identify non-storm water discharges from the MS4 as a source of pollutants that cause or contribute to exceedance of receiving water limitations, the Watershed Control Measures shall include strategies, control measures, and/or BMPs that must be implemented to effectively eliminate the source of pollutants consistent with Parts III.A and VI.D.10. These may include measures to prohibit the non-storm water discharge to the MS4, additional BMPs to reduce pollutants in the non-storm water discharge or conveyed by the non-storm water discharge,

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diversion to a sanitary sewer for treatment, or strategies to require the non-storm water discharge to be separately regulated under a general NPDES permit.

- (3) TMDL Control Measures. Permittees shall compile control measures that have been identified in TMDLs and corresponding implementation plans. Permittees shall identify those control measures to be modified, if any, to most effectively address TMDL requirements within the watershed. If not sufficiently identified in previous documents, or if implementation plans have not yet been developed (e.g., USEPA established TMDLs), the Permittees shall evaluate and identify control measures to achieve water quality-based effluent limitations and/or receiving water limitations established in this Order pursuant to these TMDLs.
 - (a) TMDL control measures shall include where necessary control measures to address both storm water and non-storm water discharges from the MS4.
 - (b) TMDL control measures may include baseline or customized activities covered under the general MCM categories in Part VI.D as well as BMPs and other control measures covered under the non-storm water discharge provisions of Part III.A of this Order.
 - (c) The WMP shall include, at a minimum, those actions that will be implemented during the permit term to achieve interim and/or final water quality-based effluent limitations and/or receiving water limitations with compliance deadlines within the permit term.
- (4) Each plan shall include the following components:
 - (a) Identification of specific structural controls and non-structural best management practices, including operational source control and pollution prevention, and any other actions or programs to achieve all water quality-based effluent limitations and receiving water limitations contained in this Part VI.E and Attachments L through R to which the Permittee(s) is subject;
 - (b) For each structural control and non-structural best management practice, the number, type, and location(s) and/or frequency of implementation;
 - (c) For any pollution prevention measures, the nature, scope, and timing of implementation;
 - (d) For each structural control and non-structural best management practice, interim milestones and dates for achievement to ensure that TMDL compliance deadlines will be met; and

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- (e) The plan shall clearly identify the responsibilities of each participating Permittee for implementation of watershed control measures.
- (5) Permittees shall conduct a Reasonable Assurance Analysis for each water body-pollutant combination addressed by the Watershed Management Program. A Reasonable Assurance Analysis (RAA) shall be quantitative and performed using a peer-reviewed model in the public domain. Models to be considered for the RAA, without exclusion, are the Watershed Management Modeling System (WMMS), Hydrologic Simulation Program-FORTRAN (HSPF), and the Structural BMP Prioritization and Analysis Tool (SBPAT). The RAA shall commence with assembly of all available, relevant subwatershed data collected within the last 10 years, including land use and pollutant loading data, establishment of quality assurance/quality control (QA/QC) criteria, QA/QC checks of the data, and identification of the data set meeting the criteria for use in the analysis. Data on performance of watershed control measures needed as model input shall be drawn only from peer-reviewed sources. These data shall be statistically analyzed to determine the best estimate of performance and the confidence limits on that estimate for the pollutants to be evaluated. The objective of the RAA shall be to demonstrate the ability of Watershed Management Programs and ~~enhanced Watershed Management Program~~ EWMPs to ensure that Permittees' MS4 discharges achieve applicable water quality based effluent limitations and do not cause or contribute to exceedances of receiving water limitations.
- (a) Permittees shall demonstrate using the RAA that the activities and control measures identified in the Watershed Control Measures will achieve applicable water quality-based effluent limitations and/or receiving water limitations in Attachments L through R with compliance deadlines during the permit term.
- (b) Where the TMDL Provisions in Part VI.E and Attachments L through R do not include interim or final water quality-based effluent limitations and/or receiving water limitations with compliance deadlines during the permit term, Permittees shall identify interim milestones and dates for their achievement to ensure adequate progress toward achieving interim and final water quality-based effluent limitations and/or receiving water limitations with deadlines beyond the permit term.
- (c) For water body-pollutant combinations not addressed by TMDLs, Permittees shall demonstrate using the RAA that the activities and control measures identified in the Watershed Control Measures will achieve applicable receiving water limitations as soon as possible.

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- (6) Permittees shall provide documentation that they have the necessary legal authority to implement the Watershed Control Measures identified in the plan, or that other legal authority exists to compel implementation of the Watershed Control Measures.

c. Compliance Schedules

Permittees shall incorporate compliance schedules in Attachments L through R into the plan and, where necessary develop interim milestones and dates for their achievement. Compliance schedules and interim milestones and dates for their achievement shall be used to measure progress towards addressing the highest water quality priorities and achieving applicable water quality-based effluent limitations and/or receiving water limitations.

- i. Schedules must be adequate for measuring progress on a watershed scale once every two years.
- ii. Schedules must be developed for both the strategies, control measures and BMPs implemented by each Permittee within its jurisdiction and for those that will be implemented by multiple Permittees on a watershed scale.
- iii. Schedules shall incorporate the following:
 - (1) Compliance deadlines occurring within the permit term for all applicable interim and/or final water quality-based effluent limitations and/or receiving water limitations in Part VI.E and Attachments L through R of this Order,
 - (2) Interim milestones and dates for their achievement within the permit term for any applicable final water quality-based effluent limitation and/or receiving water limitation in Part VI.E and Attachments L through R, where deadlines within the permit term are not otherwise specified.
 - (3) For watershed priorities related to addressing exceedances of receiving water limitations in Part V.A and not otherwise addressed by Part VI.E:
 - (a) Milestones based on measureable criteria or indicators, to be achieved in the receiving waters and/or MS4 discharges,
 - (a) A schedule with dates for achieving the milestones, and
 - (b) A final date for achieving the receiving water limitations as soon as possible.

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- (c) The milestones and implementation schedule in (a)-(c) fulfill the requirements in Part V.A.3.a to prepare an Integrated Monitoring Compliance Report.

6. Watershed Management Program Implementation

Each Permittee shall begin implementing the Watershed Management Program or EWMP immediately upon approval of the plan by the Regional Water Board or the Executive Officer on behalf of the Regional Water Board.

- a. Permittees may request an extension of deadlines for achievement of interim milestones established pursuant to Part VI.C.4.c.iii.(3) only. Permittees shall provide requests in writing at least 90 days prior to the deadline and shall include in the request the justification for the extension. Extensions shall be subject to approval by the Regional Water Board Executive Officer.

7. Integrated Watershed Monitoring and Assessment

Permittees in each WMA shall develop an integrated monitoring program as set forth in Part IV of the MRP (Attachment E) or implement a customized monitoring program with the primary objective of allowing for the customization of the outfall monitoring program (Parts VIII and IX) in conjunction with an approved Watershed Management Program or EWMP, as defined below. Each monitoring program shall assess progress toward achieving the water quality-based effluent limitations and/or receiving water limitations per the compliance schedules, and progress toward addressing the water quality priorities for each WMA. The customized monitoring program shall be submitted as part of the Watershed Management Program, or where Permittees elect to develop an ~~enhanced Watershed Management Program~~ EWMP, shall be submitted within 18 months of the effective date of this Order. If pursuing a customized monitoring program, the Permittee(s) shall provide sufficient justification for each element of the program that differs from the monitoring program requirements as set forth in Attachment E. Monitoring programs shall be subject to approval by the Executive Officer following a public comment period. The customized monitoring program shall be designed to address the Primary Objectives detailed in Attachment E, Part II.A and shall include the following program elements:

- Receiving Water Monitoring
- Storm Water Outfall Monitoring
- Non-Storm Water Outfall Monitoring
- New Development/Re-Development Effectiveness Tracking
- Regional Studies

8. Adaptive Management Process

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a. Watershed Management Program Adaptive Management Process

- i. Permittees in each WMA shall implement an adaptive management process, every two years from the date of program approval, adapting the Watershed Management Program or ~~enhanced~~ EWMP to become more effective, based on, but not limited to a consideration of the following:
- (1) Progress toward achieving interim and/or final water quality-based effluent limitations and/or receiving water limitations in Part VI.E and Attachments L through R, according to established compliance schedules;
 - (2) Progress toward achieving improved water quality in MS4 discharges and achieving receiving water limitations through implementation of the watershed control measures based on an evaluation of outfall-based monitoring data and receiving water monitoring data;
 - (3) Achievement of interim milestones;
 - (4) Re-evaluation of the water quality priorities identified for the WMA based on more recent water quality data for discharges from the MS4 and the receiving water(s) and a reassessment of sources of pollutants in MS4 discharges;
 - (5) Availability of new information and data from sources other than the Permittees' monitoring program(s) within the WMA that informs the effectiveness of the actions implemented by the Permittees;
 - (6) Regional Water Board recommendations; and
 - (7) Recommendations for modifications to the Watershed Management Program solicited through a public participation process.
- ii. Based on the results of the adaptive management process, Permittees shall report any modifications, including where appropriate new compliance deadlines and interim milestones, with the exception of those compliance deadlines established in a TMDL, necessary to improve the effectiveness of the Watershed Management Program or ~~enhanced Watershed Management Program~~ EWMP in the Annual Report, as required pursuant to Part XVIII.A.6 of the MRP (Attachment E), and as part of the Report of Waste Discharge (ROWD) required pursuant to Part II.B of Attachment D – Standard Provisions.
- (1) The adaptive management process fulfills the requirements in Part V.A.4 to address continuing exceedances of receiving water limitations.
- iii. Permittees shall implement any modifications to the Watershed Management Program or ~~enhanced Watershed Management Program~~ EWMP upon

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approval by the Regional Water Board Executive Officer or within 60 days of submittal if the Regional Water Board Executive Officer expresses no objections.

D. Storm Water Management Program Minimum Control Measures

1. General Requirements

- a. Each Permittee shall implement the requirements in Parts VI.D.4 through VI.D.10 below, or may in lieu of the requirements in Parts VI.D.4 through VI.D.10 implement customized actions within each of these general categories of control measures as set forth in an approved Watershed Management Program per Part VI.C. Implementation shall be consistent with the requirements of 40 CFR § 122.26(d)(2)(iv).
- b. Timelines for Implementation
 - i. Unless otherwise noted in Part VI.D, each Permittee that does not elect to develop a Watershed Management Program or ~~enhanced Watershed Management Program~~EWMP per Part VI.C shall implement the requirements contained in Part VI.D within 6 months after the effective date of this Order. In the interim, a Permittee shall continue to implement its existing storm water management program, including actions within each of the six categories of minimum control measures consistent with 40 CFR section 122.26(d)(2)(iv).
 - ii. Permittees that elect to develop a Watershed Management Program or ~~enhanced Watershed Management Program~~EWMP shall continue to implement their existing storm water management programs, including actions within each of the six categories of minimum control measures consistent with 40 CFR section 122.26(d)(2)(iv) until the Watershed Management Program or ~~enhanced Watershed Management Program~~EWMP is approved by the Regional Water Board Executive Officer.

2. Progressive Enforcement and Interagency Coordination

- a. Each Permittee shall develop and implement a Progressive Enforcement Policy to ensure that (1) regulated Industrial/Commercial facilities, (2) construction sites, (3) development and redevelopment sites with post-construction controls, and (4) illicit discharges are each brought into compliance with all storm water and non-storm water requirements within a reasonable time period as specified below.
 - i. Follow-up Inspections

In the event that a Permittee determines, based on an inspection or illicit discharge investigation conducted, that a facility or site operator has failed to adequately implement all necessary BMPs, that Permittee shall take progressive enforcement actions which, at a minimum, shall include a follow-

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up inspection within 4 weeks from the date of the initial inspection and/or investigation.

ii. Enforcement Action

In the event that a Permittee determines that a facility or site operator has failed to adequately implement BMPs after a follow-up inspection, that Permittee shall take enforcement action as established through authority in its municipal code and ordinances, through the judicial system, or refer the case to the Regional Water Board, per the Interagency Coordination provisions below.

iii. Records Retention

Each Permittee shall maintain records, per their existing record retention policies, and make them available on request to the Regional Water Board, including inspection reports, warning letters, notices of violations, and other enforcement records, demonstrating a good faith effort to bring facilities into compliance.

iv. Referral of Violations of Municipal Ordinances and California Water Code § 13260

A Permittee may refer a violation(s) of its municipal storm water ordinances and/or California Water Code section 13260 by Industrial and Commercial facilities and construction site operators to the Regional Water Board provided that the Permittee has made a good faith effort of applying its Progressive Enforcement Policy to achieve compliance with its own ordinances. At a minimum, a Permittee's good faith effort must be documented with:

- (1) Two follow-up inspections, and
- (2) Two warning letters or notices of violation.

v. Referral of Violations of the Industrial and Construction General Permits, including Requirements to File a Notice of Intent or No Exposure Certification

For those facilities or site operators in violation of municipal storm water ordinances and subject to the Industrial and/or Construction General Permits, Permittees may escalate referral of such violations to the Regional Water Board (promptly via telephone or electronically) after one inspection and one written notice of violation (copied to the Regional Water Board) to the facility or site operator regarding the violation. In making such referrals, Permittees shall include, at a minimum, the following documentation:

- (1) Name of the facility or site,
- (2) Operator of the facility or site,
- (3) Owner of the facility or site,
- (4) WDID Number (if applicable),

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- (5) Records of communication with the facility/site operator regarding the violation, which shall include at least one inspection report,
- (6) The written notice of violation (copied to the Regional Water Board),
- (7) For industrial sites, the industrial activity being conducted at the facility that is subject to the Industrial General Permit, and
- (8) For construction sites, site acreage and Risk Factor rating.

b. Investigation of Complaints Transmitted by the Regional Water Board Staff

Each Permittee shall initiate, within one business day,²³ investigation of complaints from facilities within its jurisdiction. The initial investigation shall include, at a minimum, a limited inspection of the facility to confirm validity of the complaint and to determine if the facility is in compliance with municipal storm water ordinances and, if necessary, to oversee corrective action.

c. Assistance with Regional Water Board Enforcement Actions

As directed by the Regional Water Board Executive Officer, Permittees shall assist Regional Water Board enforcement actions by:

- i. Assisting in identification of current owners, operators, and lessees of properties and sites.
- ii. Providing staff, when available, for joint inspections with Regional Water Board inspectors.
- iii. Appearing to testify as witnesses in Regional Water Board enforcement hearings.
- iv. Providing copies of inspection reports and documentation demonstrating application of its Progressive Enforcement Policy.

3. Modifications/Revisions

- a. Each Permittee shall modify its storm water management programs, protocols, practices, and municipal codes to make them consistent with the requirements in this Order.

4. Requirements Applicable to the Los Angeles County Flood Control District

a. Public Information and Participation Program (PIPP)

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²³ Permittees may comply with the Permit by taking initial steps (such as logging, prioritizing, and tasking) to “initiate” the investigation within that one business day. However, the Regional Water Board would expect that the initial investigation, including a site visit, to occur within four business days.

i. General

- (1) The LACFCD shall participate in a regional Public Information and Participation Program (PIPP) or alternatively, shall implement its own PIPP that includes the requirements listed in this part. The LACFCD shall collaborate, as necessary, with other Permittees to implement PIPP requirements. The objectives of the PIPP are as follows:
 - (a) To measurably increase the knowledge of the target audience about the MS4, the adverse impacts of storm water pollution on receiving waters and potential solutions to mitigate the impacts.
 - (b) To measurably change the waste disposal and storm water pollution generation behavior of target audiences by encouraging the implementation of appropriate alternatives by providing information to the public.
 - (c) To involve and engage a diversity of socio-economic groups and ethnic communities in Los Angeles County to participate in mitigating the impacts of stormwater pollution.

ii. PIPP Implementation

- (1) The LACFCD shall implement the PIPP requirements listed in this Part VI.D.5 using one or more of the following approaches:
 - (a) By participating in a collaborative PIPP covering the entire service area of the Los Angeles County Flood Control District,
 - (b) By participating in one or more Watershed Group sponsored PIPPs, and/or
 - (c) Individually within the service area of the Los Angeles County Flood Control District.
- (2) If the LACFCD participates in a collaborative District-wide or Watershed Group PIPP, the LACFCD shall provide the contact information for their appropriate staff responsible for storm water public education activities to the designated PIPP coordinator and contact information changes no later than 30 days after a change occurs.

iii. Public Participation

- (1) The LACFCD, in collaboration with the County of Los Angeles, shall continue to maintain the countywide hotline (888-CLEAN-LA) for public reporting of clogged catch basin inlets and illicit discharges/dumping, faded or missing catch basin labels, and general storm water management information.
 - (a) The LACFCD shall include the reporting information, updated when necessary, in public information, and the government pages of the telephone book, as they are developed or published.

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- (b) The LACFCD, in collaboration with the County of Los Angeles, shall continue to maintain the www.888cleanla.com website.

iv. Residential Outreach Program

- (1) Working in conjunction with a District-wide or Watershed Group sponsored PIPP or individually, the LACFCD shall implement the following activities:
 - (a) Conduct storm water pollution prevention public service announcements and advertising campaigns
 - (b) Facilitate the dissemination of public education materials including, at a minimum, information on the proper handling (i.e., disposal, storage and/or use) of:
 - () Vehicle waste fluids
 - (i) Household waste materials (i.e., trash and household hazardous waste)
 - (ii) Construction waste materials
 - (iii) Pesticides and fertilizers (including integrated pest management practices [IPM] to promote reduced use of pesticides),
 - (iv) Green waste (including lawn clippings and leaves)
 - (v) Animal wastes
 - (c) Facilitate the dissemination of activity-specific storm water pollution prevention public education materials, at a minimum, for the following points of purchase:
 - (i) Automotive parts stores
 - (ii) Home improvement centers / lumber yards / hardware stores / paint stores
 - (iii) Landscaping / gardening centers
 - (iv) Pet shops / feed stores
 - (d) Maintain a storm water website, which shall include educational material and opportunities for the public to participate in storm water pollution prevention and clean-up activities listed in Part VI.D.5.
 - (e) When implementing activities in (a)-(d), the LACFCD shall use effective strategies to educate and involve ethnic communities in storm water pollution prevention through culturally effective methods.

b. Industrial/Commercial Facilities Program

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If the LACFCD operates, or has authority over, any facility(ies) identified in Part VI.D.6.b, LACFCD shall comply with the requirements in Part VI.D.6 for those facilities.

c. Public Agency Activities Program

i. General

- (1) The LACFCD shall implement a Public Agency Activities Program to minimize storm water pollution impacts from LACFCD-owned or operated facilities and activities. Requirements for Public Agency Facilities and Activities consist of the following components:
 - (a) Public Construction Activities Management.
 - (b) Public Facility Inventory
 - (c) Public Facility and Activity Management
 - (d) Vehicle and Equipment Washing
 - (e) Landscape and Recreational Facilities Management
 - (f) Storm Drain Operation and Maintenance
 - (g) Parking Facilities Management
 - (h) Emergency Procedures
 - (i) Employee and Contractor Training

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ii. Public Construction Activities Management

- (1) The LACFCD shall implement and comply with the Planning and Land Development Program requirements in Part VI.D.7 of this Order at LACFCD-owned or operated public construction projects that are categorized under the project types identified in Part VI.D.7 of this Order.
- (2) The LACFCD shall implement and comply with the appropriate Development Construction Program requirements in Part VI.D.8 of this Order at LACFCD-owned or operated construction projects as applicable.
- (3) For LACFCD-owned or operated projects that disturb less than one acre of soil, the LACFCD shall require the implementation of an effective combination of erosion and sediment control BMPs from Table 13 (see Construction Development Program).
- (4) The LACFCD shall obtain separate coverage under the Construction General Permit for all LACFCD-owned or operated construction sites that require coverage.

iii. Public Facility Inventory

- (1) The LACFCD shall maintain an updated watershed-based inventory and map of all LACFCD-owned or operated facilities that are potential sources of storm water pollution. The incorporation of facility information into a GIS is recommended. Sources to be tracked include but are not limited to the following:
 - (a) Chemical storage facilities
 - (b) Equipment storage and maintenance facilities (including landscape maintenance-related operations)
 - (c) Fueling or fuel storage facilities
 - (d) Materials storage yards
 - (e) Pesticide storage facilities
 - (f) LACFCD buildings
 - (g) LACFCD vehicle storage and maintenance yards
 - (h) All other LACFCD-owned or operated facilities or activities that the LACFCD determines may contribute a substantial pollutant load to the MS4.
- (2) The LACFCD shall include the following minimum fields of information for each LACFCD-owned or operated facility in its watershed-based inventory and map.
 - (a) Name of facility
 - (b) Name of facility manager and contact information

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- (c) Address of facility (physical and mailing)
 - (d) A narrative description of activities performed and principal products used at each facility and status of exposure to storm water.
 - (e) Coverage under the Industrial General Permit or other individual or general NPDES permits or any applicable waiver issued by the Regional or State Water Board pertaining to storm water discharges.
- (3) The LACFCD shall update its inventory and map once during the Permit term. The update shall be accomplished through a collection of new information obtained through field activities.

iv. Public Agency Facility and Activity Management

- (1) The LACFCD shall obtain separate coverage under the Industrial General Permit for all LACFCD-owned or operated facilities where industrial activities are conducted that require coverage under the Industrial General Permit.
- (2) The LACFCD shall implement the following measures for flood management projects:
 - (a) Develop procedures to assess the impacts of flood management projects on the water quality of receiving waterbodies; and
 - (b) Evaluate existing structural flood control facilities during the planning phases of major maintenance or rehabilitation projects to determine if retrofitting the facility to provide additional pollutant removal from storm water is feasible.

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- (3) The LACFCD shall implement and maintain the general and activity-specific BMPs listed in Table 18 (BMPs for Public Agency Facilities and Activities) or an equivalent set of BMPs when such activities occur at LACFCD-owned or operated facilities and field activities (e.g., project sites) including but not limited to the facility types listed in Part VI.D.9.c above, and at any area that includes the activities described in Table 18, or that have the potential to discharge pollutants in storm water.
- (4) Any contractors hired by the LACFCD to conduct Public Agency Activities shall be contractually required to implement and maintain the general and activity specific BMPs listed in Table 18 or an equivalent set of BMPs. The LACFCD shall conduct oversight of contractor activities to ensure these BMPs are implemented and maintained.
- (5) Effective source control BMPs for the activities listed in Table 18 shall be implemented at LACFCD-owned or operated facilities, unless the pollutant generating activity does not occur. The LACFCD shall require implementation of additional BMPs where storm water from the MS4 discharges to a significant ecological area (SEA, see Attachment A for definition), a water body subject to TMDL Provisions in Part VI.E, or a CWA section 303(d) listed water body (see Part VI.E below). Likewise, for those BMPs that are not adequately protective of water quality standards, the LACFCD shall implement additional site-specific controls.

v. Vehicle and Equipment Washing

- (1) The LACFCD shall implement and maintain the activity specific BMPs listed in Table 18 (BMPs for Public Agency Facilities and Activities) or an equivalent set of BMPs for all fixed vehicle and equipment washing areas;
- (2) The LACFCD shall prevent discharges of wash waters from vehicle and equipment washing to the MS4 by implementing any of the following measures at existing facilities with vehicle or equipment wash areas:
 - (a) Self-contain, and haul off for disposal; or
 - (b) Equip with a clarifier or an alternative pre-treatment device and plumb to the sanitary sewer in accordance with applicable waste water provider regulations

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- (3) The LACFCD shall ensure that any LACFCD facilities constructed, redeveloped, or replaced shall not discharge wastewater from vehicle and equipment wash areas to the MS4 by plumbing all areas to the sanitary sewer in accordance with applicable waste water provider regulations, or self-containing all waste water/ wash water and hauling to a point of legal disposal.

vi. Landscape and Recreational Facilities Management

- (1) The LACFCD shall implement and maintain the activity specific BMPs listed in Table 18 (BMPs for Public Agency Facilities and Activities) or an equivalent set of BMPs for all its public right-of-ways, flood control facilities and open channels and reservoirs, and landscape and recreational facilities and activities.
- (2) The LACFCD shall implement an IPM program that includes the following:
 - (a) Pesticides are used only if monitoring indicates they are needed, and pesticides are applied according to applicable permits and established guidelines.
 - (b) Treatments are made with the goal of removing only the target organism.
 - (c) Pest controls are selected and applied in a manner that minimizes risks to human health, beneficial non-target organisms, and the environment.
 - (d) The use of pesticides, including Organophosphates and Pyrethroids, does not threaten water quality.
 - (e) Partner, as appropriate, with other agencies and organizations to encourage the use of IPM.
 - (f) Adopt and verifiably implement policies, procedures, and/ or ordinances requiring the minimization of pesticide use and encouraging the use of IPM techniques (including beneficial insects) for Public Agency Facilities and Activities.
 - (g) Policies, procedures, and ordinances shall include a schedule to reduce the use of pesticides that cause impairment of surface waters by implementing the following procedures:
 - (i) Prepare and annually update an inventory of pesticides used by all internal departments, divisions, and other operational units.
 - (ii) Quantify pesticide use by staff and hired contractors.
 - (iii) Demonstrate implementation of IPM alternatives where feasible to reduce pesticide use.

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- (3) The LACFCD shall implement the following requirements:
 - (a) Use a standardized protocol for the routine and non-routine application of pesticides (including pre-emergents), and fertilizers.
 - (b) Ensure no application of pesticides or fertilizers are applied to an area immediately prior to, during or immediately after a rain event, or when water is flowing off the area.
 - (c) Ensure that no banned or unregistered pesticides are stored or applied.
 - (d) Ensure that all staff applying pesticides are certified in the appropriate category by the California Department of Pesticide Regulation, or are under the direct supervision of a pesticide applicator certified in the appropriate category.
 - (e) Implement procedures to encourage the retention and planting of native vegetation to reduce water, pesticide and fertilizer needs; and
 - (f) Store pesticides and fertilizers indoors or under cover on paved surfaces, or use secondary containment.
 - (i) Reduce the use, storage, and handling of hazardous materials to reduce the potential for spills.
 - (ii) Regularly inspect storage areas.

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vii. Storm Drain Operation and Management

- (1) The LACFCD shall implement and maintain the activity specific BMPs listed in Table 18 or equivalent set of BMPs for storm drain operation and maintenance.
- (2) Ensure that all the material removed from the MS4 does not reenter the system. Solid material shall be dewatered in a contained area and liquid material shall be disposed in accordance with any of the following measures:
 - (a) Self-contain, and haul off for legal disposal; or
 - (b) Equip with a clarifier or an alternative pre-treatment device; and plumb to the sanitary sewer in accordance with applicable waste water provider regulations.
- (3) Catch Basin Cleaning
 - (a) In areas that are not subject to a trash TMDL, the LACFCD shall determine priority areas and shall update its map or list of catch basins with their GPS coordinates and priority:
 - Priority A: Catch basins that are designated as consistently generating the highest volumes of trash and/or debris.

Priority B: Catch basins that are designated as consistently generating moderate volumes of trash and/or debris.

Priority C: Catch basins that are designated as generating low volumes of trash and/or debris.

The map or list shall contain the rationale or data to support priority designations.

- (b) In areas not subject to a trash TMDL, the LACFCD shall inspect its catch basins according to the following schedule:

Priority A: A minimum of 3 times during the wet season (October 1 through April 15) and once during the dry season every year.

Priority B: A minimum of once during the wet season and once during the dry season every year.

Priority C: A minimum of once per year.

Catch basins shall be cleaned as necessary on the basis of inspections. At a minimum, LACFCD shall ensure that any catch basin that is determined to be at least 25% full of trash shall be cleaned out. LACFCD shall maintain inspection and cleaning records for Regional Water Board review.

- (c) In areas that are subject to a trash TMDL, the subject Permittees shall implement the applicable provisions in Part VI.E.

(4) Catch Basin Labels and Open Channel Signage

- (a) LACFCD shall label all catch basin inlets that they own with a legible “no dumping” message.
- (b) The LACFCD shall inspect the legibility of the catch basin stencil or label nearest the inlet prior to the wet season every year.
- (c) The LACFCD shall record all catch basins with illegible stencils and re-stencil or re-label within 180 days of inspection.
- (d) The LACFCD shall post signs, referencing local code(s) that prohibit littering and illegal dumping, at designated public access points to open channels, creeks, urban lakes, and other relevant waterbodies.

(5) Open Channel Maintenance

The LACFCD shall implement a program for Open Channel Maintenance that includes the following:

- (a) Visual monitoring of LACFCD owned open channels and other drainage structures for trash and debris at least annually;

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- (b) Removal of trash and debris from open channels a minimum of once per year before the wet season;
 - (c) Elimination of the discharge of contaminants produced by storm drain maintenance and clean outs; and
 - (d) Proper disposal of debris and trash removed during open channel maintenance.
- (6) Infiltration from Sanitary Sewer to MS4/Preventive Maintenance
- (a) The LACFCD shall implement controls and measures to prevent and eliminate infiltration of seepage from sanitary sewers to its MS4 through routine preventive maintenance of its MS4.
 - (b) The LACFCD shall implement controls to limit infiltration of seepage from sanitary sewers to its MS4 where necessary. Such controls must include:
 - (i) Adequate plan checking for construction and new development;
 - (ii) Incident response training for its employees that identify sanitary sewer spills;
 - (iii) Code enforcement inspections;
 - (iv) MS4 maintenance and inspections;
 - (v) Interagency coordination with sewer agencies; and
 - (vi) Proper education of its staff and contractors conducting field operations on its MS4.
- (7) LACFCD-Owned Treatment Control BMPs
- (a) The LACFCD shall implement an inspection and maintenance program for all LACFCD-owned treatment control BMPs, including post-construction treatment control BMPs.
 - (b) The LACFCD shall ensure proper operation of all its treatment control BMPs and maintain them as necessary for proper operation, including all post-construction treatment control BMPs.
 - (c) Any residual water produced by a treatment control BMP and not being internal to the BMP performance when being maintained shall be:
 - (i) Hauled away and legally disposed of; or
 - (ii) Applied to the land without runoff; or
 - (iii) Discharged to the sanitary sewer system (with permits or authorization); or
 - (iv) Treated or filtered to remove bacteria, sediments, nutrients, and meet the limitations set in Table 19 (Discharge Limitations

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for Dewatering Treatment BMPs), prior to discharge to the MS4.

viii. Parking Facilities Management

LACFCD-owned parking lots exposed to storm water shall be kept clear of debris and excessive oil buildup and cleaned no less than 2 times per month and/or inspected no less than 2 times per month to determine if cleaning is necessary. In no case shall a LACFCD-owned parking lot be cleaned less than once a month.

ix. Emergency Procedures

The LACFCD may conduct repairs and rehabilitation of essential public service systems and infrastructure in emergency situations with a self-waiver of the provisions of this Order as follows:

- (1) The LACFCD shall abide by all other regulatory requirements, including notification to other agencies as appropriate.
- (2) Where the self-waiver has been invoked, the LACFCD shall notify the Regional Water Board Executive Officer of the occurrence of the emergency no later than 30 business days after the situation of emergency has passed.
- (3) Minor repairs of essential public service systems and infrastructure in emergency situations (that can be completed in less than one week) are not subject to the notification provisions. Appropriate BMPs to reduce the threat to water quality shall be implemented.

x. Employee and Contractor Training

- (1) The LACFCD shall, no later than one year after Order adoption and annually thereafter before June 30, train all of their employees and contractors in targeted positions (whose interactions, jobs, and activities affect storm water quality) on the requirements of the overall storm water management program to:
 - (a) Promote a clear understanding of the potential for activities to pollute storm water.
 - (b) Identify opportunities to require, implement, and maintain appropriate BMPs in their line of work.
- (2) The LACFCD shall, no later than one year after Order adoption and annually thereafter before June 30, train all of their employees and contractors who use or have the potential to use pesticides or fertilizers (whether or not they normally apply these as part of their work). Training programs shall address:
 - (a) The potential for pesticide-related surface water toxicity.

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- (b) Proper use, handling, and disposal of pesticides.
- (c) Least toxic methods of pest prevention and control, including IPM.
- (d) Reduction of pesticide use.
- (3) The LACFCD shall require appropriate training of contractor employees in targeted positions as described above.

d. Illicit Connections and Illicit Discharge Elimination Program

i. General

- (1) The LACFCD shall continue to implement an Illicit Connection and Illicit Discharge (IC/ID) Program to detect, investigate, and eliminate IC/IDs to its MS4. The IC/ID Program must be implemented in accordance with the requirements and performance measures specified in the following subsections.
- (2) As stated in Part VI.A.2 of this Order, each Permittee must have adequate legal authority to prohibit IC/IDs to the MS4 and enable enforcement capabilities to eliminate the source of IC/IDs.
- (3) The LACFCD’s IC/ID Program shall consist of at least the following major program components:
 - (a) An up-to-date map of LACFCD’s MS4
 - (b) Procedures for conducting source investigations for IC/IDs
 - (c) Procedures for eliminating the source of IC/IDs
 - (d) Procedures for public reporting of illicit discharges
 - (e) Spill response plan
 - (f) IC/IDs education and training for LACFCD staff

ii. MS4 Mapping

- (1) The LACFCD shall maintain an up-to-date and accurate electronic map of its MS4. If possible, the map should be maintained within a GIS. The map must show the following, at a minimum:
 - (a) Within one year of Permit adoption, the location of outfalls owned and maintained by the LACFCD. Each outfall shall be given an alphanumeric identifier, which must be noted on the map. Each mapped outfall shall be located using a geographic positioning system (GPS). Photographs of the major outfalls shall be taken to provide baseline information to track operation and maintenance needs over time.
 - (b) The location and length of open channels and underground storm drain pipes with a diameter of 36 inches or greater that are owned and operated by the LACFCD.

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- (c) The location and name of all waterbodies receiving discharges from those MS4 major outfalls identified in (a).
 - (d) All LACFCD's dry weather diversions installed within the MS4 to direct flows from the MS4 to the sanitary sewer system, including the owner and operator of each diversion.
 - (e) By the end of the Permit term, map all known permitted and documented connections to its MS4 system.
- (2) The MS4 map shall be updated as necessary.

iii. Illicit Discharge Source Investigation and Elimination

- (1) The LACFCD shall develop written procedures for conducting investigations to prioritize and identify the source of all illicit discharges to its MS4, including procedures to eliminate the discharge once the source is located.
- (2) At a minimum, the LACFCD shall initiate²⁴ an investigation(s) to identify and locate the source within one business day of becoming aware of the illicit discharge.
- (3) When conducting investigations, the LACFCD shall comply with the following:
 - (a) Illicit discharges suspected of being sanitary sewage and/or significantly contaminated shall be investigated first.
 - (b) The LACFCD shall track all investigations to document, at a minimum, the date(s) the illicit discharge was observed; the results of the investigation; any follow-up of the investigation; and the date the investigation was closed.
 - (c) The LACFCD shall prioritize and investigate the source of all observed illicit discharges to its MS4.
 - (d) If the source of the illicit discharge is found to be a discharge authorized under an NPDES permit, the LACFCD shall document the source and report to the Regional Water Board within 30 days of determination. No further action is required.
 - (e) If the source of the illicit discharge has been determined to originate from within the jurisdiction of other Permittee(s) with land use authority over the suspected responsible party/parties, the LACFCD shall immediately alert the appropriate Permittee(s) of the problem for further action by the Permittee(s).

²⁴ Permittees may comply with the Permit by taking initial steps (such as logging, prioritizing, and tasking) to "initiate" the investigation within one business day. However, the Regional Water Board would expect that the initial investigation, including a site visit, occur within two business days of becoming aware of the illicit discharge.

- (4) When taking corrective action to eliminate illicit discharges, the LACFCD shall comply with the following:
- (a) If the source of the illicit discharge has been determined or suspected by the LACFCD to originate within an upstream jurisdiction(s), the LACFCD shall immediately notify the upstream jurisdiction(s), and notify the Regional Water Board within 30 days of such determination and provide all the information collected and efforts taken.
 - (b) Once the Permittee with land use authority over the suspected responsible party/parties has been alerted, the LACFCD may continue to work in cooperation with the Permittee(s) to notify the responsible party/parties of the problem, and require the responsible party/parties to immediately initiate necessary corrective actions to eliminate the illicit discharge. Upon being notified that the discharge has been eliminated, the LACFCD may, in conjunction with the Permittee(s) conduct a follow-up investigation to verify that the discharge has been eliminated and cleaned up to the satisfaction of the LACFCD. The LACFCD shall document its follow-up investigation. The LACFCD may seek recovery and remediation costs from responsible parties or require compensation for the cost of all inspection and investigation activities. Resulting enforcement actions shall follow the program's Progressive Enforcement Policy.
 - (c) If the source of the illicit discharge cannot be traced to a suspected responsible party, the LACFCD, in conjunction with other affected Permittees, shall continue implementing the illicit discharge/spill response plan.
- (5) In the event the LACFCD and/or other Permittees are unable to eliminate an ongoing illicit discharge following full execution of its legal authority and in accordance with its Progressive Enforcement Policy, including the inability to find the responsible party/parties, or other circumstances prevent the full elimination of an ongoing illicit discharge, the LACFCD and/or other Permittees shall notify the Regional Water Board within 30 days of such determination and provide available information to the Regional Water Board.

iv. Identification and Response to Illicit Connections

(1) Investigation

The LACFCD, upon discovery or upon receiving a report of a suspected illicit connection, shall initiate an investigation within 21 days, to determine the following: (1) source of the connection, (2) nature and volume of discharge through the connection, and (3) responsible party for the connection.

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(2) Elimination

The LACFCD, upon confirmation of an illicit connection to its MS4, shall ensure that the connection is:

- (a) Permitted or documented, provided the connection will only discharge storm water and non-storm water allowable under this Order or other individual or general NPDES Permits/WDRs, or
- (b) Eliminated within 180 days of completion of the investigation, using its formal enforcement authority, if necessary, to eliminate the illicit connection.

(3) Documentation

Formal records must be maintained for all illicit connection investigations and the formal enforcement taken to eliminate illicit connections.

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v. Public Reporting of Non-Stormwater Discharges and Spills

- (1) The LACFCD shall, in collaboration with the County, continue to maintain the 888-CLEAN-LA hotline and corresponding internet site at www.888cleanla.org to promote, publicize, and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into or from MS4s.
- (2) The LACFCD shall include information regarding public reporting of illicit discharges or improper disposal on the signage adjacent to open channels as required in Part VI.D.9.h.vi.(4).
- (3) The LACFCD shall develop and maintain written procedures that document how complaint calls and internet submissions are received, documented, and tracked to ensure that all complaints are adequately addressed. The procedures shall be evaluated annually to determine whether changes or updates are needed to ensure that the procedures accurately document the methods employed by the LACFCD. Any identified changes shall be made to the procedures subsequent to the annual evaluation.
- (4) The LACFCD shall maintain documentation of the complaint calls and internet submissions and record the location of the reported spill or IC/ID and the actions undertaken, including referrals to other agencies, in response to all IC/ID complaints.

vi. Illicit Discharge and Spill Response Plan

- (1) The LACFCD shall implement an ID and spill response plan for all spills that may discharge into its system. The ID and spill response plan shall clearly identify agencies responsible for ID and spill response and cleanup, contact information, and shall contain at a minimum the following requirements:
 - (a) Coordination with spill response teams throughout all appropriate departments, programs and agencies so that maximum water quality protection is provided.
 - (b) Initiation of investigation of all public and employee ID and spill complaints within one business day of receiving the complaint to assess validity.
 - (c) Response to ID and spills within 4 hours of becoming aware of the ID or spill, except where such IDs or spills occur on private property, in which case the response should be within 2 hours of gaining legal access to the property.
 - (d) IDs or spills that may endanger health or the environment shall be reported to appropriate public health agencies and the Office of Emergency Services (OES).

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vii. Illicit Connection and Illicit Discharge Education and Training

- (1) The LACFCD must continue to implement a training program regarding the identification of IC/IDs for all LACFCD field staff, who, as part of their normal job responsibilities (e.g., storm drain inspection and maintenance), may come into contact with or otherwise observe an illicit discharge or illicit connection to its MS4. Contact information, including the procedure for reporting an illicit discharge, must be included in the LACFCD's fleet vehicles that are used by field staff. Training program documents must be available for review by the Regional Water Board.
- (2) The LACFCD's training program should address, at a minimum, the following:
 - (a) IC/ID identification, including definitions and examples,
 - (b) investigation,
 - (c) elimination,
 - (d) cleanup,
 - (e) reporting, and
 - (f) documentation.
- (3) The LACFCD must create a list of applicable positions which require IC/ID training and ensure that training is provided at least twice during the term of this Order. The LACFCD must maintain documentation of the training activities.
- (4) New LACFCD staff members must be provided with IC/ID training within 180 days of starting employment.
- (5) The LACFCD shall require its contractors to train their employees in targeted positions as described above.

5. Public Information and Participation Program**a. General**

- i. Each Permittee shall implement a Public Information and Participation Program (PIPP) that includes the requirements listed in this Part VI.D.5. Each Permittee shall be responsible for developing and implementing the PIPP and implementing specific PIPP requirements. The objectives of the PIPP are as follows:
 - (1) To measurably increase the knowledge of the target audiences about the MS4, the adverse impacts of storm water pollution on receiving waters and potential solutions to mitigate the impacts.
 - (2) To measurably change the waste disposal and storm water pollution generation behavior of target audiences by developing and encouraging the implementation of appropriate alternatives.

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- (3) To involve and engage a diversity of socio-economic groups and ethnic communities in Los Angeles County to participate in mitigating the impacts of storm water pollution.

b. PIPP Implementation

- i. Each Permittee shall implement the PIPP requirements listed in this Part VI.D.4 using one or more of the following approaches:
 - (1) By participating in a County-wide PIPP,
 - (2) By participating in one or more Watershed Group sponsored PIPPs, and/or
 - (3) Or individually within its jurisdiction.
- ii. If a Permittee participates in a County-wide or Watershed Group PIPP, the Permittee shall provide the contact information for their appropriate staff responsible for storm water public education activities to the designated PIPP coordinator and contact information changes no later than 30 days after a change occurs.

c. Public Participation

- i. Each Permittee, whether participating in a County-wide or Watershed Group sponsored PIPP, or acting individually, shall provide a means for public reporting of clogged catch basin inlets and illicit discharges/dumping, faded or missing catch basin labels, and general storm water and non-storm water pollution prevention information.
 - (1) Permittees may elect to use the 888-CLEAN-LA hotline as the general public reporting contact or each Permittee or Watershed Group may establish its own hotline, if preferred.
 - (2) Each Permittee shall include the reporting information, updated when necessary, in public information, and the government pages of the telephone book, as they are developed or published.
 - (3) Each Permittee shall identify staff or departments who will serve as the contact person(s) and shall make this information available on its website.
 - (4) Each Permittee is responsible for providing current, updated hotline contact information to the general public within its jurisdiction.
- ii. Organize events targeted to residents and population subgroups to educate and involve the community in storm water and non-storm water pollution prevention and clean-up (e.g., education seminars, clean-ups, and community catch basin stenciling).

d. Residential Outreach Program

- i. Working in conjunction with a County-wide or Watershed Group sponsored PIPP or individually, each Permittee shall implement the following activities:

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- (1) Conduct storm water pollution prevention public service announcements and advertising campaigns
- (2) Public education materials shall include but are not limited to information on the proper handling (i.e., disposal, storage and/or use) of:
 - (a) Vehicle waste fluids
 - (b) Household waste materials (i.e., trash and household hazardous waste, including personal care products and pharmaceuticals)
 - (c) Construction waste materials
 - (d) Pesticides and fertilizers (including integrated pest management practices [IPM] to promote reduced use of pesticides)
 - (e) Green waste (including lawn clippings and leaves)
 - (f) Animal wastes
- (3) Distribute activity specific storm water pollution prevention public education materials at, but not limited to, the following points of purchase:
 - (a) Automotive parts stores
 - (b) Home improvement centers / lumber yards / hardware stores/paint stores
 - (c) Landscaping / gardening centers
 - (d) Pet shops / feed stores
- (4) Maintain storm water websites or provide links to storm water websites via the Permittee’s website, which shall include educational material and opportunities for the public to participate in storm water pollution prevention and clean-up activities listed in Part VI.D.4.
- (5) Provide independent, parochial, and public schools within in each Permittee’s jurisdiction with materials to educate school children (K-12) on storm water pollution. Material may include videos, live presentations, and other information. Permittees are encouraged to work with, or leverage, materials produced by other statewide agencies and associations such as the State Water Board’s “Erase the Waste” educational program and the California Environmental Education Interagency Network (CEEIN) to implement this requirement.
- (6) When implementing activities in subsections (1)-(5), Permittees shall use effective strategies to educate and involve ethnic communities in storm water pollution prevention through culturally effective methods.

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6. Industrial/Commercial Facilities Program

a. General

- i. Each Permittee shall implement an Industrial / Commercial Facilities Program that meets the requirements of this Part VI.D.6. The Industrial / Commercial

Facilities Program shall be designed to prevent illicit discharges into the MS4 and receiving waters, reduce industrial / commercial discharges of storm water to the maximum extent practicable, and prevent industrial / commercial discharges from the MS4 from causing or contributing to a violation of receiving water limitations. At a minimum, the Industrial / Commercial Facilities Program shall be implemented in accordance with the requirements listed in this Part VI.D.6, or as approved in a Watershed Management Program per Part VI.C. Minimum program components shall include the following components:

- (1) Track
- (2) Educate
- (3) Inspect
- (4) Ensure compliance with municipal ordinances at industrial and commercial facilities that are critical sources of pollutants in storm water

b. Track Critical Industrial / Commercial Sources

- i. Each Permittee shall maintain an updated watershed-based inventory or database containing the latitude / longitude coordinates of all industrial and commercial facilities within its jurisdiction that are critical sources of storm water pollution. The inventory or database shall be maintained in electronic format and incorporation of facility information into a Geographical Information System (GIS) is recommended. Critical Sources to be tracked are summarized below:

- (1) Commercial Facilities
 - (a) Restaurants
 - (b) Automotive service facilities (including those located at automotive dealerships)
 - (c) Retail Gasoline Outlets
 - (d) Nurseries and Nursery Centers (Merchant Wholesalers, Nondurable Goods, and Retail Trade)
- (2) USEPA "Phase I" Facilities [as specified in 40 CFR §122.26(b)(14)(i)-(xi)]
- (3) Other federally-mandated facilities [as specified in 40 CFR §122.26(d)(2)(iv)(C)]
 - (a) Municipal landfills
 - (b) Hazardous waste treatment, disposal, and recovery facilities
 - (c) Industrial facilities subject to section 313 "Toxic Release Inventory" reporting requirements of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) [42 U.S.C. § 11023]
- (4) All other commercial or industrial facilities that the Permittee determines may contribute a substantial pollutant load to the MS4.

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- ii. Each Permittee shall include the following minimum fields of information for each critical source industrial and commercial facility identified in its watershed-based inventory or database:
- (1) Name of facility
 - (2) Name of owner/ operator and contact information
 - (3) Address of facility (physical and mailing)
 - (4) North American Industry Classification System (NAICS) code
 - (5) Standard Industrial Classification (SIC) code
 - (6) A narrative description of the activities performed and/or principal products produced
 - (7) Status of exposure of materials to storm water
 - (8) Name of receiving water
 - (9) Identification of whether the facility is tributary to a CWA § 303(d) listed water body segment or water body segment subject to a TMDL, where the facility generates pollutants for which the water body segment is impaired.
 - (10) Ability to denote if the facility is known to maintain coverage under the State Water Board's General NPDES Permit for the Discharge of Stormwater Associated with Industrial Activities (Industrial General Permit) or other individual or general NPDES permits or any applicable waiver issued by the Regional or State Water Board pertaining to storm water discharges.
 - (11) Ability to denote if the facility has filed a No Exposure Certification with the State Water Board.
- iii. Each Permittee shall update its inventory of critical sources at least annually. The update shall be accomplished through collection of new information obtained through field activities or through other readily available inter- and intra-agency informational databases (e.g., business licenses, pretreatment permits, sanitary sewer connection permits, and similar information).
- c. Educate Industrial / Commercial Sources**
- i. At least once during the five-year period of this Order, each Permittee shall notify the owner/operator of each of its inventoried commercial and industrial sites identified in Part VI.D.6.b of the BMP requirements applicable to the site/source.
 - ii. Business Assistance Program
 - (1) Each Permittee shall implement a Business Assistance Program to provide technical information to businesses to facilitate their efforts to reduce the discharge of pollutants in storm water. Assistance shall be targeted to select business sectors or small businesses upon a

determination that their activities may be contributing substantial pollutant loads to the MS4 or receiving water. Assistance may include technical guidance and provision of educational materials. The Program may include:

- (a) On-site technical assistance, telephone, or e-mail consultation regarding the responsibilities of business to reduce the discharge of pollutants, procedural requirements, and available guidance documents.
- (b) Distribution of storm water pollution prevention educational materials to operators of auto repair shops; car wash facilities; restaurants and mobile sources including automobile/equipment repair, washing, or detailing; power washing services; mobile carpet, drape, or upholstery cleaning services; swimming pool, water softener, and spa services; portable sanitary services; and commercial applicators and distributors of pesticides, herbicides and fertilizers, if present.

d. Inspect Critical Commercial Sources

i. Frequency of Mandatory Commercial Facility Inspections

Each Permittee shall inspect all commercial facilities identified in Part VI.D.6.b twice during the 5-year term of the Order, provided that the first mandatory compliance inspection occurs no later than 2 years after the effective date of this Order. A minimum interval of 6 months between the first and the second mandatory compliance inspection is required. In addition, each Permittee shall implement the activities outlined in the following subparts.

ii. Scope of Mandatory Commercial Facility Inspections

Each Permittee shall inspect all commercial facilities to confirm that storm water and non-storm water BMPs are being effectively implemented in compliance with municipal ordinances. At each facility, inspectors shall verify that the operator is implementing effective source control BMPs for each corresponding activity. Each Permittee shall require implementation of additional BMPs where storm water from the MS4 discharges to a significant ecological area (SEA), a water body subject to TMDL provisions in Part VI.E, or a CWA § 303(d) listed impaired water body. Likewise, for those BMPs that are not adequately protective of water quality standards, a Permittee may require additional site-specific controls.

e. Inspect Critical Industrial Sources

Each Permittee shall conduct industrial facility compliance inspections as specified below.

i. Frequency of Mandatory Industrial Facility Compliance Inspections

(1) Minimum Inspection Frequency

Each Permittee shall perform an initial mandatory compliance inspection at all industrial facilities identified in Part VI.D.6.b no later than 2 years

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after the effective date of this Order. After the initial inspection, all facilities that have not filed a No Exposure Certification with the State Water Board are subject to a second mandatory compliance inspection. A minimum interval of 6 months between the first and the second mandatory compliance inspection is required. A facility need not be inspected more than twice during the term of the Order unless subject to an enforcement action as specified in Part VI.D.6.h below.

(2) Exclusion of Facilities Previously Inspected by the Regional Water Board

Each Permittee shall review the State Water Board's Storm Water Multiple Application and Report Tracking System (SMARTS) database²⁵ at defined intervals to determine if an industrial facility has recently been inspected by the Regional Water Board. The first interval shall occur approximately 2 years after the effective date of the Order. The Permittee does not need to inspect the facility if it is determined that the Regional Water Board conducted an inspection of the facility within the prior 24 month period. The second interval shall occur approximately 4 years after the effective date of the Order. Likewise, the Permittee does not need to inspect the facility if it is determined that the Regional Water Board conducted an inspection of the facility within the prior 24 month period.

(3) No Exposure Verification

As a component of the first mandatory inspection, each Permittee shall identify those facilities that have filed a No Exposure Certification with the State Water Board. Approximately 3 to 4 years after the effective date of the Order, each Permittee shall evaluate its inventory of industrial facilities and perform a second mandatory compliance inspection at a minimum of 25% of the facilities identified to have filed a No Exposure Certification. The purpose of this inspection is to verify the continuity of the no exposure status.

(4) Exclusion Based on Watershed Management Program

A Permittee is exempt from the mandatory inspection frequencies listed above if it is implementing industrial inspections in accordance with an approved Watershed Management Program per Part VI.C.

ii. Scope of Mandatory Industrial Facility Inspections

Each Permittee shall confirm that each industrial facility:

- (1) Has a current Waste Discharge Identification (WDID) number for coverage under the Industrial General Permit, and that a Storm Water Pollution Prevention Plan (SWPPP) is available on-site; *or*
- (2) Has applied for, and has received a current No Exposure Certification for facilities subject to this requirement;

²⁵ SMARTS is accessible at <https://smarts.waterboards.ca.gov/smarts/faces/SwSmartsLogin.jsp>

- (3) Is effectively implementing BMPs in compliance with municipal ordinances. Facilities must implement the source control BMPs identified in Table 10, unless the pollutant generating activity does not occur. The Permittees shall require implementation of additional BMPs where storm water from the MS4 discharges to ~~an environmentally sensitive area~~, a water body subject to TMDL Provisions in Part VI.E, or a CWA § 303(d) listed impaired water body. Likewise, if the specified BMPs are not adequately protective of water quality standards, a Permittee may require additional site-specific controls. For critical sources that discharge to MS4s that discharge to SEAs, each Permittee shall require operators to implement additional pollutant-specific controls to reduce pollutants in storm water runoff that are causing or contributing to exceedances of water quality standards.
- (4) Applicable industrial facilities identified as not having either a current WDID or No Exposure Certification shall be notified that they must obtain coverage under the Industrial General Permit and shall be referred to the Regional Water Board per the Progressive Enforcement Policy procedures identified in Part VI.D.2.

f. Source Control BMPs for Commercial and Industrial Facilities

Effective source control BMPs for the activities listed in Table 10 shall be implemented at commercial and industrial facilities, unless the pollutant generating activity does not occur:

Table 10. Source Control BMPs at Commercial and Industrial Facilities

Pollutant-Generating Activity	BMP Narrative Description
Unauthorized Non-Storm water Discharges	Effective elimination of non-storm water discharges
Accidental Spills/ Leaks	Implementation of effective spills/ leaks prevention and response procedures
Vehicle/ Equipment Fueling	Implementation of effective fueling source control devices and practices
Vehicle/ Equipment Cleaning	Implementation of effective equipment/ vehicle cleaning practices and appropriate wash water management practices
Vehicle/ Equipment Repair	Implementation of effective vehicle/ equipment repair practices and source control devices
Outdoor Liquid Storage	Implementation of effective outdoor liquid storage source controls and practices
Outdoor Equipment Operations	Implementation of effective outdoor equipment source control devices and practices
Outdoor Storage of Raw Materials	Implementation of effective source control practices and structural devices

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Pollutant-Generating Activity	BMP Narrative Description
Storage and Handling of Solid Waste	Implementation of effective solid waste storage/handling practices and appropriate control measures
Building and Grounds Maintenance	Implementation of effective facility maintenance practices
Parking/ Storage Area Maintenance	Implementation of effective parking/ storage area designs and housekeeping/ maintenance practices
Storm water Conveyance System Maintenance Practices	Implementation of proper conveyance system operation and maintenance protocols
Pollutant-Generating Activity	BMP Narrative Description from Regional Water Board Resolution No. 98-08
Sidewalk Washing	<ol style="list-style-type: none"> 1. Remove trash, debris, and free standing oil/grease spills/leaks (use absorbent material, if necessary) from the area before washing; and 2. Use high pressure, low volume spray washing using only potable water with no cleaning agents at an average usage of 0.006 gallons per square feet of sidewalk area.
Street Washing	Collect and divert wash water to the sanitary sewer – publically owned treatment works (POTW). Note: POTW approval may be needed.

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g. Significant Ecological Areas (SEAs)

~~For critical sources that discharge to MS4s that discharge to SEAs, each Permittee shall require operators to implement additional pollutant-specific controls to reduce pollutants in storm water runoff that are causing or contributing to exceedances of water quality standards. See VI.D.6.e.ii.3.~~

h. Progressive Enforcement

Each Permittee shall implement its Progressive Enforcement Policy to ensure that Industrial / Commercial facilities are brought into compliance with all storm water requirements within a reasonable time period. See Part VI.D.2 for requirements for the development and implementation of a Progressive Enforcement Policy.

7. Planning and Land Development Program

a. Purpose

- i. Each Permittee shall implement a Planning and Land Development Program pursuant to Part VI.D.7.b for all New Development and Redevelopment projects subject to this Order to:
- (1) Lessen the water quality impacts of development by using smart growth practices such as compact development, directing development towards existing communities via infill or redevelopment, and safeguarding of environmentally sensitive areas.
 - (2) Minimize the adverse impacts from storm water runoff on the biological integrity of Natural Drainage Systems and the beneficial uses of water bodies in accordance with requirements under CEQA (Cal. Pub. Resources Code § 21000 et seq.).
 - (3) Minimize the percentage of impervious surfaces on land developments by minimizing soil compaction during construction, designing projects to minimize the impervious area footprint, and employing Low Impact Development (LID) design principles to mimic predevelopment hydrology through infiltration, evapotranspiration and rainfall harvest and use.
 - (4) Maintain existing riparian buffers and enhance riparian buffers when possible.
 - (5) Minimize pollutant loadings from impervious surfaces such as roof tops, parking lots, and roadways through the use of properly designed, technically appropriate BMPs (including Source Control BMPs such as good housekeeping practices), LID Strategies, and Treatment Control BMPs.
 - (6) Properly select, design and maintain LID and Hydromodification Control BMPs to address pollutants that are likely to be generated, reduce changes to pre-development hydrology, assure long-term function, and avoid the breeding of vectors²⁶.
 - (7) Prioritize the selection of BMPs to remove storm water pollutants, reduce storm water runoff volume, and beneficially use storm water to support an integrated approach to protecting water quality and managing water resources in the following order of preference:
 - (a) On-site infiltration, bioretention and/or rainfall harvest and use.
 - (b) On-site biofiltration, off-site ground water replenishment, and/or off-site retrofit.

b. Applicability

i. New Development Projects

²⁶ Treatment BMPs when designed to drain within 96 hours of the end of rainfall minimize the potential for the breeding of vectors. See [California Department of Public Health Best Management Practices for Mosquito Control in California Manual \(2012\)](http://sgvmosquito.org/downloads/NPDES/BMP%20for%20Mosquito%20Control%2008-10.pdf) at <http://sgvmosquito.org/downloads/NPDES/BMP%20for%20Mosquito%20Control%2008-10.pdf> www.westnile.ca.gov/resources.php

- (1) Development projects subject to Permittee conditioning and approval for the design and implementation of post-construction controls to mitigate storm water pollution, prior to completion of the project(s), are:
- (a) All development projects equal to 1 acre or greater of disturbed area and adding more than 10,000 square feet of impervious surface area
 - (b) Industrial parks 10,000 square feet or more of surface area
 - (c) Commercial malls 10,000 square feet or more surface area
 - (d) Retail gasoline outlets 5,000 square feet or more of surface area
 - (e) Restaurants (SIC 5812) 5,000 square feet or more of surface area
 - (f) Parking lots 5,000 square feet or more of impervious surface area, or with 25 or more parking spaces
 - (g) Street and road construction of 10,000 square feet or more of impervious surface area shall follow USEPA guidance regarding Managing Wet Weather with Green Infrastructure: Green Streets²⁷ (December 2008 EPA-833-F-08-009) to the maximum extent practicable. Street and road construction applies to standalone streets, roads, highways, and freeway projects, and also applies to streets within larger projects.
 - (h) Automotive service facilities (SIC 5013, 5014, 5511, 5541, 7532-7534 and 7536-7539) 5,000 square feet or more of surface area
 - (i) Redevelopment projects in subject categories that meet Redevelopment thresholds identified in Part VI.D.6.b.ii (Redevelopment Projects) below
 - (j) Projects located in or directly adjacent to, or discharging directly to a Significant Ecological Area (SEA), where the development will:
 - (i) Discharge storm water runoff that is likely to impact a sensitive biological species or habitat; and
 - (ii) Create 2,500 square feet or more of impervious surface area
 - (k) Single-family hillside homes. To the extent that a Permittee may lawfully impose conditions, mitigation measures or other requirements on the development or construction of a single-family home in a hillside area as defined in the applicable Permittee's Code and Ordinances, each Permittee shall require that during the construction of a single-family hillside home, the following measures are implemented:
 - (i) Conserve natural areas
 - (ii) Protect slopes and channels
 - (iii) Provide storm drain system stenciling and signage

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²⁷ <http://water.epa.gov/infrastructure/greeninfrastructure/index.cfm>

- (iv) Divert roof runoff to vegetated areas before discharge unless the diversion would result in slope instability
- (v) Direct surface flow to vegetated areas before discharge unless the diversion would result in slope instability.

ii. Redevelopment Projects

- (1) Redevelopment projects subject to Permittee conditioning and approval for the design and implementation of post-construction controls to mitigate storm water pollution, prior to completion of the project(s), are:
 - (a) Land-disturbing activity that results in the creation or addition or replacement of 5,000 square feet or more of impervious surface area on an already developed site on development categories identified in Part VI.D.6.c. (New Development/Redevelopment Performance Criteria).
 - (b) Where Redevelopment results in an alteration to more than fifty percent of impervious surfaces of a previously existing development, and the existing development was not subject to post-construction storm water quality control requirements, the entire project must be mitigated.
 - (c) Where Redevelopment results in an alteration of less than fifty percent of impervious surfaces of a previously existing development, and the existing development was not subject to post-construction storm water quality control requirements, only the alteration must be mitigated, and not the entire development.
 - (i) Redevelopment does not include routine maintenance activities that are conducted to maintain original line and grade, hydraulic capacity, original purpose of facility or emergency redevelopment activity required to protect public health and safety. Impervious surface replacement, such as the reconstruction of parking lots and roadways which does not disturb additional area and maintains the original grade and alignment, is considered a routine maintenance activity. Redevelopment does not include the repaving of existing roads to maintain original line and grade.
 - (ii) Existing single-family dwelling and accessory structures are exempt from the Redevelopment requirements unless such projects create, add, or replace 10,000 square feet of impervious surface area.
 - (d) In this section, Existing Development or Redevelopment projects shall mean all discretionary permit projects or project phases that have not been deemed complete for processing, or discretionary permit projects without vesting tentative maps that have not requested and received an extension of previously granted approvals within 90 days of adoption of the Order. Projects that have been deemed complete within 90 days of adoption of the Order are not

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subject to the requirements Section 7.~~bc~~. -For Permittee’s projects the effective date shall be the date the governing body or their designee approves initiation of the project design.;

(e) Specifically, the Newhall Ranch Project Phases I and II (a.k.a. the Landmark and Mission Village projects) are deemed to be an existing development that will at a minimum, be designed to comply with the Specific LID Performance Standards attached to the Waste Discharge Requirements (Order No. R4-2012-~~XXXX~~0139). All subsequent phases of the Newhall Ranch Project constructed during the term of this Order shall be subject to the requirements of this Order.

c. New Development/ Redevelopment Project Performance Criteria

i. Integrated Water Quality/Flow Reduction/Resources Management Criteria

- (1) Each Permittee shall require all New Development and Redevelopment projects (referred to hereinafter as “new projects”) identified in Part VI.D.7.b to control pollutants, pollutant loads, and runoff volume emanating from the project site by: (1) minimizing the impervious surface area and (2) controlling runoff from impervious surfaces through infiltration, bioretention and/or rainfall harvest and use.
- (2) Except as provided in Part VI.D.7.c.ii. (Technical Infeasibility or Opportunity for Regional Ground Water Replenishment), Part VI.D.7.d.i (Local Ordinance Equivalence), or Part VI.D.7.c.v (Hydromodification), below, each Permittee shall require the project to retain on-site the Stormwater Quality Design Volume (SWQDv) defined as the runoff from:
 - (a) The 0.75-inch, 24-hour rain event or
 - (b) The 85th percentile, 24-hour rain event, as determined from the Los Angeles County 85th percentile precipitation isohyetal map, *whichever is greater*.
- (3) Bioretention and biofiltration systems shall meet the design specifications provided in Attachment H to this Order unless otherwise approved by the Regional Water Board Executive Officer.
- (4) When evaluating the potential for on-site retention, each Permittee shall consider the maximum potential for evapotranspiration from green roofs and rainfall harvest and use.

ii. Alternative Compliance for Technical Infeasibility or Opportunity for Regional Ground Water Replenishment

- (1) In instances of technical infeasibility or where a project has been determined to provide an opportunity to replenish regional ground water supplies at an offsite location, each Permittee may allow projects to comply with this Order through the alternative compliance measures as described in Part VI.D.7.c.iii.

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- (2) To demonstrate technical infeasibility, the project applicant must demonstrate that the project cannot reliably retain 100 percent of the SWQDv on-site, even with the maximum application of green roofs and rainwater harvest and use, and that compliance with the applicable post-construction requirements would be technically infeasible by submitting a site-specific hydrologic and/or design analysis conducted and endorsed by a registered professional engineer, geologist, architect, and/or landscape architect. Technical infeasibility may result from conditions including the following:
- (a) The infiltration rate of saturated in-situ soils is less than 0.3 inch per hour and it is not technically feasible to amend the in-situ soils to attain an infiltration rate necessary to achieve reliable performance of infiltration or bioretention BMPs in retaining the SWQDv on-site.
 - (b) Locations where seasonal high ground water is within 5 to 10 feet of the surface,
 - (c) Locations within 100 feet of a ground water well used for drinking water,
 - (d) Brownfield development sites where infiltration poses a risk of causing pollutant mobilization,
 - (e) Other locations where pollutant mobilization is a documented concern²⁸,
 - (f) Locations with potential geotechnical hazards, or
 - (g) Smart growth and infill or redevelopment locations where the density and/ or nature of the project would create significant difficulty for compliance with the on-site volume retention requirement.
- (3) To utilize alternative compliance measures to replenish ground water at an offsite location, the project applicant shall demonstrate *(i)* why it is not advantageous to replenish ground water at the project site, *(ii) that ground water can be used for beneficial purposes at the offsite location*, and *(iii)* that the alternative measures shall also provide equal or greater water quality benefits to the receiving surface water than the Water Quality/Flow Reduction/Resource Management Criteria in Part VI.7.D.c.i.

iii. Alternative Compliance Measures

When a Permittee determines a project applicant has demonstrated that it is technically infeasible to retain 100 percent of the SWQDv on-site, or is proposing an alternative offsite project to replenish regional ground water supplies, the Permittee shall require one of the following mitigation options:

(1) On-site Biofiltration

²⁸ Pollutant mobilization is considered a documented concern at or near properties that are contaminated or store hazardous substances underground.

- (a) If using biofiltration due to demonstrated technical infeasibility, then the new project must biofiltrate 1.5 times the portion of the SWQDv that is not reliably retained on-site, as calculated by Equation 1 below.

Equation 1:

$$Bv = 1.5 * [SWQDv - Rv]$$

Where:

Bv = biofiltration volume

SWQDv = the storm water runoff from a 0.75 inch, 24-hour storm or the 85th percentile storm, *whichever is greater*.

Rv = volume reliably retained on-site

(b) Conditions for On-site Biofiltration

- (i) Biofiltration systems shall meet the design specifications provided in Attachment H to this Order unless otherwise approved by the Regional Water Board Executive Officer.
- (ii) Biofiltration systems discharging to a receiving water that is included on the Clean Water Act section 303(d) list of impaired water quality-limited water bodies due to nitrogen compounds or related effects shall be designed and maintained to achieve enhanced nitrogen removal capability. See Attachment H for design criteria for underdrain placement to achieve enhanced nitrogen removal.

(2) Offsite Infiltration

- (a) Use infiltration or bioretention BMPs to intercept a volume of storm water runoff equal to the SWQDv, less the volume of storm water runoff reliably retained on-site, at an approved offsite project, and
- (b) Provide pollutant reduction (treatment) of the storm water runoff discharged from the project site in accordance with the Water Quality Mitigation Criteria provided in Part VI.D.7.c.iv.
- (c) The required offsite mitigation volume shall be calculated by Equation 2 below and equal to:

Equation 2:

$$Mv = 1.0 * [SWQDv - Rv]$$

Where:

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Mv = mitigation volume

SWQDv = runoff from the 0.75 inch, 24-hour storm event or the 85th percentile storm, *whichever is greater*

Rv = the volume of storm water runoff reliably retained on-site.

(3) Ground Water Replenishment Projects

Permittees may propose, in their Watershed Management Program or ~~enhanced Watershed Management Program~~ EWMP, regional projects to replenish regional ground water supplies at offsite locations, provided the groundwater supply has a designated beneficial use in the Basin Plan.

- (a) Regional groundwater replenishment projects must use infiltration, ground water replenishment, or bioretention BMPs to intercept a volume of storm water runoff equal to the SWQDv for new development and redevelopment projects, subject to Permittee conditioning and approval for the design and implementation of post-construction controls, within the approved project area, and
- (b) Provide pollutant reduction (treatment) of the storm water runoff discharged from development projects, within the project area, subject to Permittee conditioning and approval for the design and implementation of post-construction controls to mitigate storm water pollution in accordance with the Water Quality Mitigation Criteria provided in Part VI.D.7.c.iv.
- (c) Permittees implementing a regional ground water replenishment project in lieu of onsite controls shall ensure the volume of runoff captured by the project shall be equal to:

Equation 2:

Where:

Mv = mitigation volume

SWQDv = runoff from the 0.75 inch, 24-hour storm event or the 85th percentile storm, *whichever is greater*

Rv = the volume of storm water runoff reliably retained on-site.

- (d) Regional groundwater replenishment projects shall be located in the same sub-watershed (defined as draining to the same HUC-12 hydrologic area in the Basin Plan) as the new development or redevelopment projects which did not implement on site retention BMPs . Each Permittee may consider locations outside of the HUC-12

but within the HUC-10 subwatershed area if there are no opportunities within the HUC-12 subwatershed or if greater pollutant reductions and/or ground water replenishment can be achieved at a location within the expanded HUC-10 subwatershed. The use of a mitigation, ground water replenishment, or retrofit project outside of the HUC-12 subwatershed is subject to the approval of the Executive Officer of the Regional Water Board.

(4) Offsite Project - Retrofit Existing Development

Use infiltration, bioretention, rainfall harvest and use and/or biofiltration BMPs to retrofit an existing development, with similar land uses as the new development or land uses associated with comparable or higher storm water runoff event mean concentrations (EMCs) than the new development. Comparison of EMCs for different land uses shall be based on published data from studies performed in southern California. The retrofit plan shall be designed and constructed to:

- (a) Intercept a volume of storm water runoff equal to the mitigation volume (Mv) as described above in Equation 2, except biofiltration BMPs shall be designed to meet the biofiltration volume as described in Equation 1 and
- (b) Provide pollutant reduction (treatment) of the storm water runoff from the project site as described in the Water Quality Mitigation Criteria provided in Part VI.D.7.c.iv.

(5) Conditions for Offsite Projects

- (a) Project applicants seeking to utilize these alternative compliance provisions may propose other offsite projects, which the Permittees may approve if they meet the requirements of this subpart.
- (b) Location of offsite projects. Offsite projects shall be located in the same sub-watershed (defined as draining to the same HUC-12 hydrologic area in the Basin Plan) as the new development or redevelopment project. Each Permittee may consider locations outside of the HUC-12 but within the HUC-10 subwatershed area if there are no opportunities within the HUC-12 subwatershed or if greater pollutant reductions and/or ground water replenishment can be achieved at a location within the expanded HUC-10 subwatershed. The use of a mitigation, ground water replenishment, or retrofit project outside of the HUC-12 subwatershed is subject to the approval of the Executive Officer of the Regional Water Board.
- (c) Project applicant must demonstrate that equal benefits to ground water recharge cannot be met on the project site.
- (d) Each Permittee shall develop a prioritized list of offsite mitigation, ground water replenishment and/or retrofit projects, and when feasible,

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the mitigation must be directed to the highest priority project within the same HUC-12 or if approved by the Regional Water Board Executive Officer, the HUC-10 drainage area, as the new development project.

- (e) Infiltration/bioretention shall be the preferred LID BMP for offsite mitigation or ground water replenishment projects. Offsite retrofit projects may include green streets, parking lot retrofits, green roofs, and rainfall harvest and use. Biofiltration BMPs may be considered for retrofit projects when infiltration, bioretention or rainfall harvest and use is technically infeasible.
- (f) Each Permittee shall develop a schedule for the completion of offsite projects, including milestone dates to identify, fund, design, and construct the projects. Offsite projects shall be completed as soon as possible, and at the latest, within 4 years of the certificate of occupancy for the first project that contributed funds toward the construction of the offsite project, unless a longer period is otherwise authorized by the Executive Officer of the Regional Water Board. For public offsite projects, each Permittee must provide in their annual reports a summary of total offsite project funds raised to date and a description (including location, general design concept, volume of water expected to be retained, and total estimated budget) of all pending public offsite projects. Funding sufficient to address the offsite volume must be transferred to the Permittee (for public offsite mitigation projects) or to an escrow account (for private offsite mitigation projects) within one year of the initiation of construction.
- (g) Offsite projects must be approved by the Permittee and may be subject to approval by the Regional Water Board Executive Officer, if a third-party petitions the Executive Officer to review the project. Offsite projects will be publicly noticed on the Regional Water Board's website for 30 days prior to approval.
- (h) The project applicant must perform the offsite projects as approved by either the Permittee or the Regional Water Board Executive Officer or provide sufficient funding for public or private offsite projects to achieve the equivalent mitigation storm water volume.

(6) Regional Storm Water Mitigation Program

A Permittee or Permittee group may apply to the Regional Water Board for approval of a regional or sub-regional storm water mitigation program to substitute in part or wholly for New and Redevelopment requirements for the area covered by the regional or sub-regional storm water mitigation program. Upon review and a determination by the Regional Water Board Executive Officer that the proposal is technically valid and appropriate, the Regional Water Board may consider for approval such a program if its implementation will meet all of the following requirements:

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(a) Retains the runoff from the 85th percentile, 24-hour rain event or the 0.75 inch, 24-hour rain event, whichever is greater;

~~(a)(b)~~ Results in improved storm water quality;

~~(b)(c)~~ Protects stream habitat;

~~(c)(d)~~ Promotes cooperative problem solving by diverse interests;

~~(d)(e)~~ ~~Be Is~~ fiscally sustainable and has secure funding; and

~~(e)(f)~~ ~~Be Is~~ completed in five years including the construction and start-up of treatment facilities.

~~(f)(g)~~ Nothing in this provision shall be construed as to delay the implementation of requirements for new and redevelopment, as approved in this Order.

(7) Water Quality Mitigation Criteria

(a) Each Permittee shall require all New Development and Redevelopment projects that have been approved for offsite mitigation or ground water replenishment projects as defined in Part VI.D.7.c.ii-iii to also provide treatment of storm water runoff from the project site. Each Permittee shall require these projects to design and implement post-construction storm water BMPs and control measures to reduce pollutant loading as necessary to:

- (i) Meet the pollutant specific benchmarks listed in Table 11 at the treatment systems outlet or prior to the discharge to the MS4, and
- (ii) Ensure that the discharge does not cause or contribute to an exceedance of water quality standards at the Permittee's downstream MS4 outfall.

(b) Each Permittee may allow the project proponent to install flow-through modular treatment systems including sand filters, or other proprietary BMP treatment systems with a demonstrated efficiency at least equivalent to a sand filter. The sizing of the flow through treatment device shall be based on a rainfall intensity of:

- (i) 0.2 inches per hour, or
- (ii) The one year, one-hour rainfall intensity as determined from the most recent Los Angeles County isohyetal map, *whichever is greater*.

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Table 11. Benchmarks Applicable to New Development Treatment BMPs²⁹
Conventional Pollutants

Pollutant	Suspended Solids mg/L	Total P mg/L	Total N mg/L		TKN mg/L	
Effluent Concentration	14	0.13	1.28		1.09	

Metals

Pollutant	Total Cd µg/L	Total Cu µg/L	Total Cr µg/L	Total Pb µg/L	Total Zn µg/L
Effluent Concentration	0.3	6	2.8	2.5	23

(c) In addition to the requirements for controlling pollutant discharges as described in Part VI.D.7.c.iviii. and the treatment **requirements benchmarks** described above, each Permittee shall ensure that the new development or redevelopment will not cause or contribute to an exceedance of applicable water quality-based effluent limitations established in Part VI.E pursuant to Total Maximum Daily Loads (TMDLs).

iv. Hydromodification (Flow/ Volume/ Duration) Control Criteria

Each Permittee shall require all New Development and Redevelopment projects located within natural drainage systems as described in Part VI.D.7.c.iv.(1)(a)(iii) to implement hydrologic control measures, to prevent accelerated downstream erosion and to protect stream habitat in natural drainage systems. The purpose of the hydrologic controls is to minimize changes in post-development hydrologic storm water runoff discharge rates, velocities, and duration. This shall be achieved by maintaining the project’s pre-project storm water runoff flow rates and durations.

(1) Description

(a) Hydromodification control in natural drainage systems shall be achieved by maintaining the Erosion Potential (Ep) in streams at a value of 1, unless an alternative value can be shown to be protective of the natural drainage systems from erosion, incision, and sedimentation that can occur as a result of flow increases from impervious surfaces and prevent damage to stream habitat in

²⁹ The treatment control BMP performance **standards-benchmarks** were developed from the median effluent water quality values of the six highest performing BMPs, per pollutant, in the storm water BMP database (<http://www.bmpdatabase.org/>, last visited September 25, 2012).

natural drainage system tributaries (see Attachment J - Determination of Erosion Potential).

- (ii) Hydromodification control may include one, or a combination of on-site, regional or sub-regional hydromodification control BMPs, LID strategies, or stream and riparian buffer restoration measures. Any in-stream restoration measure shall not adversely affect the beneficial uses of the natural drainage systems.
 - (iii) Natural drainage systems that are subject to the hydromodification assessments and controls as described in this Part of the Order, include all drainages that have not been improved (e.g., channelized or armored with concrete, shotcrete, or rip-rap) or drainage systems that are tributary to a natural drainage system, except as provided in Part VI.D.7.c.iv.(1)(b)--Exemptions to Hydromodification Controls [see below]. The clearing or dredging of a natural drainage system does not constitute an "improvement."
 - (iv) Until the State Water Board or the Regional Water Board adopts a final Hydromodification Policy or criteria, Permittees shall implement the Hydromodification Control Criteria described in Part VI.D.7.c.iv.(1)(c) to control the potential adverse impacts of changes in hydrology that may result from new development and redevelopment projects located within natural drainage systems as described in Part VI.D.7.c.iv.(1)(a)(iii).
- (b) Exemptions to Hydromodification Controls. Permittees may exempt the following New Development and Redevelopment projects from implementation of hydromodification controls where assessments of downstream channel conditions and proposed discharge hydrology indicate that adverse hydromodification effects to beneficial uses of Natural Drainage Systems are unlikely:
- (i) Projects that are replacement, maintenance or repair of a Permittee's existing flood control facility, storm drain, or transportation network.
 - (ii) Redevelopment Projects in the Urban Core that do not increase the effective impervious area or decrease the infiltration capacity of pervious areas compared to the pre-project conditions.
 - (iii) Projects that have any increased discharge directly or via a storm drain to a sump, lake, area under tidal influence, into a waterway that has a 100-year peak flow (Q100) of 25,000 cfs or more, or other receiving water that is not susceptible to hydromodification impacts.

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- (iv) Projects that discharge directly or via a storm drain into concrete or otherwise engineered (not natural) channels (e.g., channelized or armored with rip rap, shotcrete, etc.), which, in turn, discharge into receiving water that is not susceptible to hydromodification impacts (as in Parts VI.D.7.c.iv.(1)(b)(i)-(iii) above).
 - (v) LID BMPs implemented on single family homes are sufficient to comply with Hydromodification criteria.
- (c) Hydromodification Control Criteria. The Hydromodification Control Criteria to protect natural drainage systems are as follows:
- (i) Except as provided for in Part VI.D.7.c.iv.(1)(b), projects disturbing an area greater than 1 acre but less than 50 acres within natural drainage systems will be presumed to meet pre-development hydrology if one of the following demonstrations is made:
 1. The project is designed to retain on-site, through infiltration, evapotranspiration, and/or harvest and use, the storm water volume from the runoff of the 95th percentile, 24-hour storm, or
 2. The runoff flow rate, volume, velocity, and duration for the post-development condition do not exceed the pre-development condition for the 2-year, 24-hour rainfall event. This condition may be substantiated by simple screening models, including those described in *Hydromodification Effects on Flow Peaks and Durations in Southern California Urbanizing Watersheds* (Hawley et al., 2011) or other models acceptable to the Executive Officer of the Regional Water Board, or
 3. The Erosion Potential (Ep) in the receiving water channel will approximate 1, as determined by a Hydromodification Analysis Study and the equation presented in Attachment J. Alternatively, Permittees can opt to use other work equations to calculate Erosion Potential with Executive Officer approval.
 - (ii) Projects disturbing 50 acres or more within natural drainage systems will be presumed to meet pre-development hydrology based on the successful demonstration of one of the following conditions:
 1. The site infiltrates on-site at least the runoff from a 2-year, 24-hour storm event, or
 2. The runoff flow rate, volume, velocity, and duration for the post-development condition does not exceed the pre-development condition for the 2-year, 24-hour rainfall events. These conditions must be substantiated by hydrologic modeling acceptable to the Regional Water Board Executive Officer, or

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3. The Erosion Potential (E_p) in the receiving water channel will approximate 1, as determined by a Hydromodification Analysis Study and the equation presented in Attachment J.

(c) Alternative Hydromodification Criteria

- (i) Permittees may satisfy the requirement for Hydromodification Controls by implementing the hydromodification requirements in the County of Los Angeles Low Impact Development Manual (2009) for all projects disturbing an area greater than 1 acre within natural drainage systems.
- (ii) Each Permittee may alternatively develop and implement watershed specific Hydromodification Control Plans (HCPs). Such plans shall be developed no later than one year after the effective date of this Order.
- (iii) The HCP shall identify:
 1. Stream classifications
 2. Flow rate and duration control methods
 3. Sub-watershed mitigation strategies
 4. Stream and/or riparian buffer restoration measures, which will maintain the stream and tributary Erosion Potential at 1 unless an alternative value can be shown to be protective of the natural drainage systems from erosion, incision, and sedimentation that can occur as a result of flow increases from impervious surfaces and prevent damage to stream habitat in natural drainage system tributaries.
- (iv) The HCP shall contain the following elements:
 1. Hydromodification Management Standards
 2. Natural Drainage Areas and Hydromodification Management Control Areas
 3. New Development and Redevelopment Projects subject to the HCP
 4. Description of authorized Hydromodification Management Control BMPs
 5. Hydromodification Management Control BMP Design Criteria
 6. For flow duration control methods, the range of flows to control for, and goodness of fit criteria
 7. Allowable low critical flow, Q_c , which initiates sediment transport

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- 8. Description of the approved Hydromodification Model
- 9. Any alternate Hydromodification Management Model and Design
- 10. Stream Restoration Measures Design Criteria
- 11. Monitoring and Effectiveness Assessment
- 12. Record Keeping
- 13. The HCP shall be deemed in effect upon Executive Officer approval.

v. Watershed Equivalence.

Regardless of the methods through which Permittees allow project applicants to implement alternative compliance measures, the subwatershed-wide (defined as draining to the same HUC-12 hydrologic area in the Basin Plan) result of all development must be at least the same level of water quality protection as would have been achieved if all projects utilizing these alternative compliance provisions had complied with Part VI.D.7.c.i (Integrated Water Quality/Flow Reduction/Resource Management Criteria).

vi. Annual Report

Each Permittee shall provide in their annual report to the Regional Water Board a list of mitigation project descriptions and estimated pollutant and flow reduction analyses (compiled from design specifications submitted by project applicants and approved by the Permittee(s)). Within 4 years of Order adoption, Permittees must submit in their Annual Report, a comparison of the expected aggregate results of alternative compliance projects to the results that would otherwise have been achieved by retaining on site the SWQDv.

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d. Implementation**i. Local Ordinance Equivalence**

A Permittee that has adopted a local LID ordinance prior to the adoption of this Order, and which includes a retention requirement numerically equal to the 0.75-inch, 24-hour rain event or the 85th percentile, 24-hour rain event, whichever is greater, may submit documentation to the Regional Water Board that the alternative requirements in the local ordinance will provide equal or greater reduction in storm water discharge pollutant loading and volume as would have been obtained through strict conformance with Part VI.D.7.c.i. (Integrated Water Quality/Flow Reduction Resources Management Criteria) or Part VI.D.7.c.ii. (Alternative Compliance Measures for Technical Infeasibility or Opportunity for Regional Ground water Replenishment) of this Order and, if applicable, Part VI.D.7.c.iv. (Hydromodification (Flow/Volume Duration) Control Criteria).

- (1) Documentation shall be submitted within 180 days after the effective date of this Order.
- (2) The Regional Water Board shall provide public notice of the proposed equivalency determination and a minimum 30-day period for public comment. After review and consideration of public comments, the Regional Water Board Executive Officer will determine whether implementation of the local ordinance provides equivalent pollutant control to the applicable provisions of this Order. Local ordinances that do not strictly conform to the provisions of this Order must be approved by the Regional Water Board Executive Officer as being “equivalent” in effect to the applicable provisions of this Order in order to substitute for the requirements in Parts VI.D.7.c.i and, where applicable, VI.D.7.c.iv.
- (3) Where the Regional Water Board Executive Officer determines that a Permittee’s local LID ordinance does not provide equivalent pollutant control, the Permittee shall either
 - (a) Require conformance with Parts VI.D.7.c.i and, where applicable, VI.D.7.c.iv, or
 - (b) Update its local ordinance to conform to the requirements herein within two years of the effective date of this Order.

ii. Project Coordination

- (1) Each Permittee shall facilitate a process for effective approval of post-construction storm water control measures. The process shall include:

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- (a) Detailed LID site design and BMP review including BMP sizing calculations, BMP pollutant removal performance, and municipal approval; and
- (b) An established structure for communication and delineated authority between and among municipal departments that have jurisdiction over project review, plan approval, and project construction through memoranda of understanding or an equivalent agreement.

iii. Maintenance Agreement and Transfer

- (1) Prior to issuing approval for final occupancy, each Permittee shall require that all new development and redevelopment projects subject to post-construction BMP requirements, with the exception of simple LID BMPs implemented on single family residences, provide an operation and maintenance plan, monitoring plan, where required, and verification of ongoing maintenance provisions for LID practices, Treatment Control BMPs, and Hydromodification Control BMPs including but not limited to: final map conditions, legal agreements, covenants, conditions or restrictions, CEQA mitigation requirements, conditional use permits, and/or other legally binding maintenance agreements. Permittees shall require maintenance records be kept on site for treatment BMPs implemented on single family residences.
 - (a) Verification at a minimum shall include the developer's signed statement accepting responsibility for maintenance until the responsibility is legally transferred; and either:
 - (i) A signed statement from the public entity assuming responsibility for BMP maintenance; or
 - (ii) Written conditions in the sales or lease agreement, which require the property owner or tenant to assume responsibility for BMP maintenance and conduct a maintenance inspection at least once a year; or
 - (iii) Written text in project covenants, conditions, and restrictions (CCRs) for residential properties assigning BMP maintenance responsibilities to the Home Owners Association; or
 - (iv) Any other legally enforceable agreement or mechanism that assigns responsibility for the maintenance of BMPs.
 - (b) Each Permittee shall require all development projects subject to post-construction BMP requirements to provide a plan for the operation and maintenance of all structural and treatment controls. The plan shall be submitted for examination of relevance to keeping the BMPs in proper working order. Where BMPs are transferred to Permittee for ownership and maintenance, the plan shall also include all relevant costs for upkeep of BMPs in the transfer. Operation and Maintenance plans for

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private BMPs shall be kept on-site for periodic review by Permittee inspectors.

iv. Tracking, Inspection, and Enforcement of Post-Construction BMPs

- (1) Each Permittee shall implement a tracking system and an inspection and enforcement program for new development and redevelopment post-construction storm water no later than 60 days after Order adoption date.
 - (a) Implement a GIS or other electronic system for tracking projects that have been conditioned for post-construction BMPs. The electronic system, at a minimum, should contain the following information:
 - (i) Municipal Project ID
 - (ii) State WDID No.
 - (iii) Project Acreage
 - (iv) BMP Type and Description
 - (v) BMP Location (coordinates)
 - (vi) Date of Acceptance
 - (vii) Date of Maintenance Agreement
 - (viii) Maintenance Records
 - (ix) Inspection Date and Summary
 - (x) Corrective Action
 - (xi) Date Certificate of Occupancy Issued
 - (xii) Replacement or Repair Date
 - (b) Inspect all development sites upon completion of construction and prior to the issuance of occupancy certificates to ensure proper installation of LID measures, structural BMPs, treatment control BMPs and hydromodification control BMPs. The inspection may be combined with other inspections provided it is conducted by trained personnel.
 - (c) Verify proper maintenance and operation of post-construction BMPs previously approved for new development and redevelopment and operated by the Permittee. The post-construction BMP maintenance inspection program shall incorporate the following elements:
 - (i) The development of a Post-construction BMP Maintenance Inspection checklist

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- (ii) Inspection at least once every 2 years after project completion, of post-construction BMPs to assess operation conditions with particular attention to criteria and procedures for post-construction treatment control and hydromodification control BMP repair, replacement, or re-vegetation.
- (d) For post-construction BMPs operated and maintained by parties other than the Permittee, the Permittee shall require the other parties to document proper maintenance and operations.
- (e) Undertake enforcement action per the established Progressive Enforcement Policy as appropriate based on the results of the inspection. See Part VI.D.2 for requirements for the development and implementation of a Progressive Enforcement Policy.

8. Development Construction Program

- a. Each Permittee shall develop, implement, and enforce a construction program that:
 - i. Prevents illicit construction-related discharges of pollutants into the MS4 and receiving waters.
 - ii. Implements and maintains structural and non-structural BMPs to reduce pollutants in storm water runoff from construction sites.
 - iii. Reduces construction site discharges of pollutants to the MS4 to the MEP.
 - iv. Prevents construction site discharges to the MS4 from causing or contributing to a violation of water quality standards.
- b. Each Permittee shall establish for its jurisdiction an enforceable erosion and sediment control ordinance for all construction sites that disturb soil.

c. Applicability

The provisions contained in Part VI.D.8.d below apply exclusively to construction sites less than 1 acre. Provisions contained in Part VI.D.8.e – j, apply exclusively to construction sites 1 acre or greater. The requirements contained in this part apply to all activities involving soil disturbance with the exception of agricultural activities. Activities covered by this permit include but are not limited to grading, vegetation clearing, soil compaction, paving, re-paving and linear underground/overhead projects (LUPs).

d. Requirements for Construction Sites Less than One Acre

- i. For construction sites less than 1 acre, each Permittee shall:

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- (1) Through the use of the Permittee’s erosion and sediment control ordinance or and/or building permit, require the implementation of an effective combination of erosion and sediment control BMPs from Table 12 to prevent erosion and sediment loss, and the discharge of construction wastes.

Table 12. Applicable Set of BMPs for All Construction Sites

Erosion Controls	Scheduling
	Preservation of Existing Vegetation
Sediment Controls	Silt Fence
	Sand Bag Barrier
	Stabilized Construction Site Entrance/Exit
Non-Storm Water Management	Water Conservation Practices
	Dewatering Operations
Waste Management	Material Delivery and Storage
	Stockpile Management
	Spill Prevention and Control
	Solid Waste Management
	Concrete Waste Management
	Sanitary/Septic Waste Management

- (2) Possess the ability to identify all construction sites with soil disturbing activities that require a permit, regardless of size, and shall be able to provide a list of permitted sites upon request of the Regional Water Board. Permittees may use existing permit databases or other tracking systems to comply with these requirements.
 - (3) Inspect construction sites on as needed based on the evaluation of the factors that are a threat to water quality. In evaluating the threat to water quality, the following factors shall be considered: soil erosion potential; site slope; project size and type; sensitivity of receiving water bodies; proximity to receiving water bodies; non-storm water discharges; past record of non-compliance by the operators of the construction site; and any water quality issues relevant to the particular MS4.
 - (4) Implement the Permittee’s Progressive Enforcement Policy to ensure that construction sites are brought into compliance with the erosion and sediment control ordinance within a reasonable time period. See Part VI.D.2 for requirements for the development and implementation of a Progressive Enforcement Policy.
- e. Each Permittee shall require operators of public and private construction sites within its jurisdiction to select, install, implement, and maintain BMPs that comply with its erosion and sediment control ordinance.
 - f. The requirements contained in this part apply to all activities involving soil disturbance with the exception of agricultural activities. Activities covered by this

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permit include but are not limited to grading, vegetation clearing, soil compaction, paving, re-paving and linear underground/overhead projects (LUPs).

g. Construction Site Inventory / Electronic Tracking System

- i. Each Permittee shall use an electronic system to inventory grading permits, encroachment permits, demolition permits, building permits, or construction permits (and any other municipal authorization to move soil and/ or construct or destruct that involves land disturbance) issued by the Permittee. To satisfy this requirement, the use of a database or GIS system is recommended.
- ii. Each Permittee shall complete an inventory and continuously update as new sites are permitted and sites are completed. The inventory / tracking system shall contain, at a minimum:
 - (1) Relevant contact information for each project (e.g., name, address, phone, email, etc. for the owner and contractor.
 - (2) The basic site information including location, status, size of the project and area of disturbance.
 - (3) The proximity all water bodies, water bodies listed as impaired by sediment-related pollutants, and water bodies for which a sediment-related TMDL has been adopted and approved by USEPA.
 - (4) Significant threat to water quality status, based on consideration of factors listed in Appendix 1 to the Statewide General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit).
 - (5) Current construction phase where feasible.
 - (6) The required inspection frequency.
 - (7) The project start date and anticipated completion date.
 - (8) Whether the project has submitted a Notice of Intent and obtained coverage under the Construction General Permit.
 - (9) The date the Permittee approved the Erosion and Sediment Control Plan (ESCP).
 - (10) Post-Construction Structural BMPs subject to Operation and Maintenance Requirements.

h. Construction Plan Review and Approval Procedures

- i. Each Permittee shall develop procedures to review and approve relevant construction plan documents.
- ii. The review procedures shall be developed and implemented such that the following minimum requirements are met:
 - (1) Prior to issuing a grading or building permit, each Permittee shall require each operator of a construction activity within its jurisdiction to prepare

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and submit an ESCP prior to the disturbance of land for the Permittee's review and written approval. The construction site operator shall be prohibited from commencing construction activity prior to receipt of written approval by the Permittee. Each Permittee shall not approve any ESCP unless it contains appropriate site-specific construction site BMPs that meet the minimum requirements of a Permittee's erosion and sediment control ordinance.

- (2) ESCPs must include the elements of a Storm Water Pollution Prevention Plan (SWPPP). SWPPPs prepared in accordance with the requirements of the Construction General Permit can be accepted as ESCPs.
- (3) At a minimum, the ESCP must address the following elements:
 - (a) Methods to minimize the footprint of the disturbed area and to prevent soil compaction outside of the disturbed area.
 - (b) Methods used to protect native vegetation and trees.
 - (c) Sediment/Erosion Control.
 - (d) Controls to prevent tracking on and off the site.
 - (e) Non-storm water controls (e.g., vehicle washing, dewatering, etc.).
 - (f) Materials Management (delivery and storage).
 - (g) Spill Prevention and Control.
 - (h) Waste Management (e.g., concrete washout/waste management; sanitary waste management).
 - (i) Identification of site Risk Level as identified per the requirements in Appendix 1 of the Construction General Permit.
- (4) The ESCP must include the rationale for the selection and design of the proposed BMPs, including quantifying the expected soil loss from different BMPs.
- (5) Each Permittee shall require that the ESCP is developed and certified by a Qualified SWPPP Developer (QSD).
- (6) Each Permittee shall require that all structural BMPs be designed by a licensed California Engineer.
- (7) Each Permittee shall require that for all sites, the landowner or the landowner's agent sign a statement on the ESCP as follows:
 - (a) "I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that submitting false and/ or inaccurate information, failing to update the

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ESCP to reflect current conditions, or failing to properly and/ or adequately implement the ESCP may result in revocation of grading and/ or other permits or other sanctions provided by law.”

- (8) Prior to issuing a grading or building permit, each Permittee must verify that the construction site operators have existing coverage under applicable permits, including, but not limited to the State Water Board’s Construction General Permit, and State Water Board 401 Water Quality Certification.
- (9) Each Permittee shall develop and implement a checklist to be used to conduct and document review of each ESCP.

i. BMP Implementation Level

- i. Each Permittee shall implement technical standards for the selection, installation and maintenance of construction BMPs for all construction sites within its jurisdiction.
- ii. The BMP technical standards shall require:
 - (1) The use of BMPs that are tailored to the risks posed by the project. Sites are to be ranked from Low Risk (Risk 1) to High Risk (Risk 3). Project risks are to be calculated based on the potential for erosion from the site and the sensitivity of the receiving water body. Receiving water bodies that are listed on the Clean Water Act (CWA) Section 303(d) list for sediment or siltation are considered High Risk. Likewise, water bodies with designated beneficial uses of SPWN, COLD, and MIGR are also considered to be High Risk. The combined (sediment/receiving water) site risk shall be calculated using the methods provided in Appendix 1 of the Construction General Permit. At a minimum, the BMP technical standards shall include requirements for High Risk sites as defined in Table 15.
 - (2) The use of BMPs for all construction sites, sites equal or greater to 1 acre, and for paving projects per Tables 14 and 16 of this Order.
 - (3) Detailed installation designs and cut sheets for use within ESCPs.
 - (4) Maintenance expectations for each BMP, or category of BMPs, as appropriate.
- iii. Permittees are encouraged to adopt respective BMPs from latest versions of the *California BMP Handbook*, *Construction or Caltrans Stormwater Quality Handbooks*, *Construction Site Best Management Practices (BMPs) Manual* and addenda. Alternatively, Permittees are authorized to develop or adopt equivalent BMP standards consistent for Southern California and for the range of activities presented below in Tables 13 through 16.
- iv. The local BMP technical standards shall be readily available to the development community and shall be clearly referenced within each Permittee’s storm water or development services website, ordinance, permit approval process and/or ESCP review forms. The local BMP technical

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standards shall also be readily available to the Regional Water Board upon request.

v. Local BMP technical standards shall be available for the following:

Table 13. Minimum Set of BMPs for All Construction Sites

Erosion Controls	Scheduling
	Preservation of Existing Vegetation
Sediment Controls	Silt Fence
	Sand Bag Barrier
	Stabilized Construction Site Entrance/Exit
Non-Storm Management	water Water Conservation Practices
	Dewatering Operations
Waste Management	Material Delivery and Storage
	Stockpile Management
	Spill Prevention and Control
	Solid Waste Management
	Concrete Waste Management
	Sanitary/Septic Waste Management

Table 14. Additional BMPs Applicable to Construction Sites Disturbing 1 Acre or More

Erosion Controls	Hydraulic Mulch
	Hydroseeding
	Soil Binders
	Straw Mulch
	Geotextiles and Mats
	Wood Mulching
Sediment Controls	Fiber Rolls
	Gravel Bag Berm
	Street Sweeping and/ or Vacuum
	Storm Drain Inlet Protection
	Scheduling
	Check Dam
Additional Controls	Wind Erosion Controls
	Stabilized Construction Entrance/ Exit
	Stabilized Construction Roadway
	Entrance/ Exit Tire Wash
Non-Storm Management	water Vehicle and Equipment Washing
	Vehicle and Equipment Fueling
	Vehicle and Equipment Maintenance
Waste Management	Material Delivery and Storage
	Spill Prevention and Control

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Table 15. Additional Enhanced BMPs for High Risk Sites

Erosion Controls	Hydraulic Mulch
	Hydroseeding
	Soil Binders
	Straw Mulch
	Geotextiles and Mats
	Wood Mulching
	Slope Drains
Sediment Controls	Silt Fence
	Fiber Rolls
	Sediment Basin
	Check Dam
	Gravel Bag Berm
	Street Sweeping and/or Vacuum
	Sand Bag Barrier
	Storm Drain Inlet Protection
Additional Controls	Wind Erosion Controls
	Stabilized Construction Entrance/Exit
	Stabilized Construction Roadway
	Entrance/Exit Tire Wash
	Advanced Treatment Systems*
Non-Storm water Management	Water Conservation Practices
	Dewatering Operations (Ground water dewatering only under NPDES Permit No. CAG994004)
	Vehicle and Equipment Washing
	Vehicle and Equipment Fueling
	Vehicle and Equipment Maintenance
Waste Management	Material Delivery and Storage
	Stockpile Management
	Spill Prevention and Control
	Solid Waste Management

* Applies to public roadway projects.

Table 16. Minimum Required BMPs for Roadway Paving or Repair Operation (For Private or Public Projects)

1.	Restrict paving and repaving activity to exclude periods of rainfall or predicted rainfall unless required by emergency conditions.
2.	Install gravel bags and filter fabric or other equivalent inlet protection at all susceptible storm drain inlets and at manholes to prevent spills of paving products and tack coat.
3.	Prevent the discharge of release agents including soybean oil, other oils, or diesel to the storm water drainage system or receiving waters.
4.	Minimize non storm water runoff from water use for the roller and for evaporative cooling of the asphalt.

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5.	Clean equipment over absorbent pads, drip pans, plastic sheeting or other material to capture all spillage and dispose of properly.
6.	Collect liquid waste in a container, with a secure lid, for transport to a maintenance facility to be reused, recycled or disposed of properly.
7.	Collect solid waste by vacuuming or sweeping and securing in an appropriate container for transport to a maintenance facility to be reused, recycled or disposed of properly.
8.	Cover the “cold-mix” asphalt (i.e., pre-mixed aggregate and asphalt binder) with protective sheeting during a rainstorm.
9.	Cover loads with tarp before haul-off to a storage site, and do not overload trucks.
10.	Minimize airborne dust by using water spray or other approved dust suppressant during grinding.
11.	Avoid stockpiling soil, sand, sediment, asphalt material and asphalt grindings materials or rubble in or near storm water drainage system or receiving waters.
12.	Protect stockpiles with a cover or sediment barriers during a rain.

j. Construction Site Inspection

- i. Each Permittee shall use its legal authority to implement procedures for inspecting public and private construction sites.
- ii. The inspection procedures shall be implemented as follows:
 - (1) Inspect the public and private construction sites as specified in Table 17 below:

Table 17. Inspection Frequencies for Sites One Acre or Greater

Site	Inspection Frequency Shall Occur
a. All sites 1 acre or larger that discharge to a tributary listed by the state as an impaired water for sediment or turbidity under the CWA § 303(d)	(1) when two or more consecutive days with greater than 50% chance of rainfall are predicted by NOAA ³⁰ , (2) within 48 hours of a 1/2-inch rain event and at (3) least once every two weeks
b. Other sites 1 acre or more determined to be a significant threat to water quality ³¹	
c. All other construction sites with 1 acre or more of soil disturbance not meeting the criteria above	At least monthly

- (2) Each Permittee shall inspect all phases of construction as follows:

³⁰ www.srh.noaa.gov/forecast

³¹ In evaluating the threat to water quality, the following factors shall be considered: soil erosion potential; site slope; project size and type; sensitivity of receiving water bodies; proximity to receiving water bodies; non-storm water discharges; past record of non-compliance by the operators of the construction site; and any water quality issues relevant to the particular MS4.

(a) Prior to Land Disturbance

Prior to allowing an operator to commence land disturbance, each Permittee shall perform an inspection to ensure all necessary erosion and sediment structural and non-structural BMP materials and procedures are available per the erosion and sediment control plan.

(b) During Active Construction, including Land Development³² and Vertical Construction³³

In accordance with the frequencies specified in Part VI.D.8.j and Table 17 of this Order, each Permittee shall perform an inspection to ensure all necessary erosion and sediment structural and non-structural BMP materials and procedures are available per the erosion and sediment control plan throughout the construction process.

(c) Final Landscaping / Site Stabilization³⁴

At the conclusion of the project and as a condition of approving and/or issuing a Certificate of Occupancy, each Permittee shall inspect the constructed site to ensure that all graded areas have reached final stabilization and that all trash, debris, and construction materials, and temporary erosion and sediment BMPs are removed.

(3) Based on the required frequencies above, each construction project shall be inspected a minimum of three times.

(4) Inspection Standard Operating Procedures

Each Permittee shall develop, implement, and revise as necessary, standard operating procedures that identify the inspection procedures each Permittee will follow. Inspections of construction sites, and the standard operating procedures, shall include, but are not limited to:

(a) Verification of active coverage under the Construction General Permit for sites disturbing 1 acre or more, or that are part of a planned development that will disturb 1 acre or more and a process for referring non-filers to the Regional Water Board.

(b) Review of the applicable ESCP and inspection of the construction site to determine whether all BMPs have been selected, installed, implemented, and maintained according to the approved plan and subsequent approved revisions.

(c) Assessment of the appropriateness of the planned and installed BMPs and their effectiveness.

³² Activities include cuts and fills, rough and finished grading; alluvium removals; canyon cleanouts; rock undercuts; keyway excavations; stockpiling of select material for capping operations; and excavation and street paving, lot grading, curbs, gutters and sidewalks, public utilities, public water facilities including fire hydrants, public sanitary sewer systems, storm sewer system and/or other drainage improvement.

³³ The build out of structures from foundations to roofing, including rough landscaping.

³⁴ All soil disturbing activities at each individual parcel within the site have been completed.

- (d) Visual observation and record keeping of non-storm water discharges, potential illicit discharges and connections, and potential discharge of pollutants in storm water runoff.
- (e) Development of a written or electronic inspection report generated from an inspection checklist used in the field.
- (f) Tracking of the number of inspections for the inventoried construction sites throughout the reporting period to verify that the sites are inspected at the minimum frequencies required in Table 17 of this Order.

k. Enforcement

Each Permittee shall implement its Progressive Enforcement Policy to ensure that construction sites are brought into compliance with all storm water requirements within a reasonable time period. See Part VI.D.2 for requirements for the development and implementation of a Progressive Enforcement Policy.

I. Permittee Staff Training

- i. Each Permittee shall ensure that all staff whose primary job duties are related to implementing the construction storm water program are adequately trained.
- ii. Each Permittee may conduct in-house training or contract with consultants. Training shall be provided to the following staff positions of the MS4:

(1) Plan Reviewers and Permitting Staff

Ensure staff and consultants are trained as qualified individuals, knowledgeable in the technical review of local erosion and sediment control ordinance, local BMP technical standards, ESCP requirements, and the key objectives of the State Water Board QSD program. Permittees may provide internal training to staff or require staff to obtain QSD certification.

(2) Erosion Sediment Control/Storm Water Inspectors

Each Permittee shall ensure that its inspectors are knowledgeable in inspection procedures consistent with the State Water Board sponsored program QSD or a Qualified SWPPP Practitioner (QSP) or that a designated person on staff who has been trained in the key objectives of the QSD/QSP programs supervises inspection operations. Each Permittee may provide internal training to staff or require staff to obtain QSD/QSP certification. Each inspector must be knowledgeable of the local BMP technical standards and ESCP requirements.

(3) Third-Party Plan Reviewers, Permitting Staff, and Inspectors

If the Permittee utilizes outside parties to conduct inspections and/or review plans, each Permittee shall ensure these staff are trained per the requirements listed above. Outside contractors can self-certify, providing

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they certify they have received all applicable training required in the Permit and have documentation to that effect.

9. Public Agency Activities Program

a. Each Permittee shall implement a Public Agency Activities Program to minimize storm water pollution impacts from Permittee-owned or operated facilities and activities and to identify opportunities to reduce storm water pollution impacts from areas of existing development. Requirements for Public Agency Facilities and Activities consist of the following components:

- i. Public Construction Activities Management
- ii. Public Facility Inventory
- iii. Inventory of Existing Development for Retrofitting Opportunities
- iv. Public Facility and Activity Management
- v. Vehicle and Equipment Wash Areas
- vi. Landscape, Park, and Recreational Facilities Management
- vii. Storm Drain Operation and Maintenance
- viii. Streets, Roads, and Parking Facilities Maintenance
- ix. Emergency Procedures
- x. Municipal Employee and Contractor Training

b. Public Construction Activities Management

- i. Each Permittee shall implement and comply with the Planning and Land Development Program requirements in Part VI.D.7 of this Order at Permittee-owned or operated (i.e., public or Permittee sponsored) construction projects that are categorized under the project types identified in Part VI.D.7.b of this Order.
- ii. Each Permittee shall implement and comply with the appropriate Development Construction Program requirements in Part VI.D.8 of this Order at Permittee-owned or operated construction projects as applicable.
- iii. For Permittee-owned or operated projects (including those under a capital improvement project plan) that disturb less than one acre of soil, each Permittee shall require an effective combination of erosion and sediment control BMPs from Table 13 (see Construction Development Program, minimum BMPs).
- iv. Each Permittee shall obtain separate coverage under the Construction General Permit for all Permittee-owned or operated construction sites that require coverage.

c. Public Facility Inventory

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- i. Each Permittee shall maintain an updated inventory of all Permittee-owned or operated (i.e., public) facilities within its jurisdiction that are potential sources of storm water pollution. The incorporation of facility information into a GIS is recommended. Sources to be tracked include but are not limited to the following:
- (1) Animal control facilities
 - (2) Chemical storage facilities
 - (3) Composting facilities
 - (4) Equipment storage and maintenance facilities (including landscape maintenance-related operations)
 - (5) Fueling or fuel storage facilities (including municipal airports)
 - (6) Hazardous waste disposal facilities
 - (7) Hazardous waste handling and transfer facilities
 - (8) Incinerators
 - (9) Landfills
 - (10) Materials storage yards
 - (11) Pesticide storage facilities
 - (12) Fire stations
 - (13) Public restrooms
 - (14) Public parking lots
 - (15) Public golf courses
 - (16) Public swimming pools
 - (17) Public parks
 - (18) Public works yards
 - (19) Public marinas
 - (20) Recycling facilities
 - (21) Solid waste handling and transfer facilities
 - (22) Vehicle storage and maintenance yards
 - (23) Storm water management facilities (e.g., detention basins)
 - (24) All other Permittee-owned or operated facilities or activities that each Permittee determines may contribute a substantial pollutant load to the MS4.
- ii. Each Permittee shall include the following minimum fields of information for each Permittee-owned or operated facility in its inventory.
- (1) Name of facility

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- (2) Name of facility manager and contact information
 - (3) Address of facility (physical and mailing)
 - (4) A narrative description of activities performed and potential pollution sources.
 - (5) Coverage under the Industrial General Permit or other individual or general NPDES permits or any applicable waiver issued by the Regional or State Water Board pertaining to storm water discharges.
- iii. Each Permittee shall update its inventory at least once during the 5-year term of the Order. The update shall be accomplished through collection of new information obtained through field activities or through other readily available inter and intra-agency informational databases (e.g., property management, land-use approvals, accounting and depreciation ledger account, and similar information).

d. Inventory of Existing Development for Retrofitting Opportunities

- i. Each Permittee shall develop an inventory of retrofitting opportunities that meets the requirements of this Part VI.9.d. Retrofit opportunities shall be identified within the public right-of-way or in coordination with a TMDL implementation plan(s). The goals of the existing development retrofitting inventory are to address the impacts of existing development through regional or sub-regional retrofit projects that reduce the discharges of storm water pollutants into the MS4 and prevent discharges from the MS4 from causing or contributing to a violation of water quality standards as defined in Part V.A, Receiving Water Limitations.
- ii. Each Permittee shall screen existing areas of development to identify candidate areas for retrofitting using watershed models or other screening level tools.
- iii. Each Permittee shall evaluate and rank the areas of existing development identified in the screening to prioritize retrofitting candidates. Criteria for evaluation may include but are not limited to:
 - (1) Feasibility, including general private and public land availability;
 - (2) Cost effectiveness;
 - (3) Pollutant removal effectiveness;
 - (4) Tributary area potentially treated;
 - (5) Maintenance requirements;
 - (6) Landowner cooperation;
 - (7) Neighborhood acceptance;
 - (8) Aesthetic qualities;
 - (9) Efficacy at addressing concern; and

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(10) Potential improvements to public health and safety.

iv. Each Permittee shall consider the results of the evaluation in the following programs:

(1) The Permittee's storm water management program: Highly feasible projects expected to benefit water quality should be given a high priority to implement source control and treatment control BMPs in a Permittee's SQMPSWMP.

(2) Off-site mitigation for New Development and Redevelopment: Each Permittee shall consider high priority retrofit projects as candidates for off-site mitigation projects per Part VI.D.7.c.iii.(4).(d).

(3) Where feasible, at the discretion of the Permittee, the existing development retrofitting program may be coordinated with flood control projects and other infrastructure improvement programs per Part VI.D.9.e.ii.(2) below.

v. Each Permittee shall cooperate with private landowners to encourage site specific retrofitting projects. Each Permittee shall consider the following practices in cooperating with private landowners to retrofit existing development:

(1) Demonstration retrofit projects;

(2) Retrofits on public land and easements that treat runoff from private developments;

(3) Education and outreach;

(4) Subsidies for retrofit projects;

(5) Requiring retrofit projects as enforcement, mitigation or ordinance compliance;

(6) Public and private partnerships;

(7) Fees for existing discharges to the MS4 and reduction of fees for retrofit implementation.

e. Public Agency Facility and Activity Management

i. Each Permittee shall obtain separate coverage under the Industrial General Permit for all Permittee-owned or operated facilities where industrial activities are conducted that require coverage under the Industrial General Permit.

ii. Each Permittee shall implement the following measures for Permittee- owned and operated flood management projects:

(1) Develop procedures to assess the impacts of flood management projects on the water quality of receiving water bodies; and

(2) Evaluate existing structural flood control facilities to determine if retrofitting the facility to provide additional pollutant removal from storm water is feasible.

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- iii. Each Permittee shall ensure the implementation and maintenance of activity specific BMPs listed in Table 18 (BMPs for Public Agency Facilities and Activities) when such activities occur at Permittee-owned or operated facilities and field activities (e.g., project sites) including but not limited to the facility types listed in Part VI.D.9.c above, and at any area that includes the activities described in Table 18, or that have the potential to discharge pollutants in storm water.
- iv. Any contractors hired by the Permittee to conduct Public Agency Activities including, but not limited to, storm and/or sanitary sewer system inspection and repair, street sweeping, trash pick-up and disposal, and street and right-of-way construction and repair shall be contractually required to implement and maintain the activity specific BMPs listed in Table 18. Each Permittee shall conduct oversight of contractor activities to ensure these BMPs are implemented and maintained.
- v. Permittee-owned or operated facilities that have obtained coverage under the Industrial General Permit shall implement and maintain BMPs consistent with the associated SWPPP and are therefore not required to implement and maintain the activity specific BMPs listed in Table 18.
- vi. Effective source control BMPs for the activities listed in Table 18 shall be implemented at Permittee-owned or operated facilities, unless the pollutant generating activity does not occur. Each Permittee shall require implementation of additional BMPs where storm water from the MS4 discharges to a significant ecological area (SEA, see Attachment A for definition), a water body subject to TMDL provisions in Part VI.E., or a CWA § 303(d) listed water body (see Part VI.E below). Likewise, for those BMPs that are not adequately protective of water quality standards, a Permittee may require additional site-specific controls.

Table 18. BMPs for Public Agency Facilities and Activities

General and Activity Specific BMPs	
General BMPs	Scheduling and Planning
	Spill Prevention and Control
	Sanitary/Septic Waste Management
	Material Use
	Safer Alternative Products
	Vehicle/Equipment Cleaning, Fueling and Maintenance
	Illicit Connection Detection, Reporting and Removal
	Illegal Spill Discharge Control
	Maintenance Facility Housekeeping Practices
	Flexible Pavement
Asphalt Paving	
Structural Pavement Failure (Digouts) Pavement Grinding and Paving	

General and Activity Specific BMPs	
	Emergency Pothole Repairs
	Sealing Operations
Rigid Pavement	Portland Cement Crack and Joint Sealing
	Mudjacking and Drilling
	Concrete Slab and Spall Repair
Slope/ Vegetation	Shoulder Grading
	Nonlandscaped Chemical Vegetation Control
	Nonlandscaped Mechanical Vegetation Control/ Mowing
	Nonlandscaped Tree and Shrub Pruning, Brush Chipping, Tree and Shrub Removal
	Fence Repair
	Drainage Ditch and Channel Maintenance
	Drain and Culvert Maintenance
	Curb and Sidewalk Repair
Drains/ Vegetation	Sweeping Operations
	Litter and Debris Removal
	Emergency Response and Cleanup Practices
	Graffiti Removal
Litter/ Debris/ Graffiti	Chemical Vegetation Control
	Manual Vegetation Control
	Landscaped Mechanical Vegetation Control/ Mowing
	Landscaped Tree and Shrub Pruning, Brush Chipping, Tree and Shrub Removal
	Irrigation Line Repairs
	Irrigation (Watering), Potable and Nonpotable
Landscaping	Storm Drain Stenciling
	Roadside Slope Inspection
	Roadside Stabilization
	Stormwater Treatment Devices
	Traction Sand Trap Devices
Environmental	Welding and Grinding
	Sandblasting, Wet Blast with Sand Injection and Hydroblasting
	Painting
	Bridge Repairs
Bridges	Pump Station Cleaning
	Tube and Tunnel Maintenance and Repair
	Tow Truck Operations
	Toll Booth Lane Scrubbing Operations
Other Structures	Sawcutting for Loop Installation
	Thermoplastic Striping and Marking
Electrical	Paint Striping and Marking
Traffic Guidance	

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General and Activity Specific BMPs	
	Raised/ Recessed Pavement Marker Application and Removal
	Sign Repair and Maintenance
	Median Barrier and Guard Rail Repair
	Emergency Vehicle Energy Attenuation Repair
Storm Maintenance	Minor Slides and Slipouts Cleanup/ Repair
Management Support and	Building and Grounds Maintenance
	Storage of Hazardous Materials (Working Stock)
	Material Storage Control (Hazardous Waste)
	Outdoor Storage of Raw Materials
	Vehicle and Equipment Fueling
	Vehicle and Equipment Cleaning
	Vehicle and Equipment Maintenance and Repair
	Aboveground and Underground Tank Leak and Spill Control

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f. Vehicle and Equipment Washing

- i. Each Permittee shall implement and maintain the activity specific BMPs listed in Table 18 (BMPs for Public Agency Facilities and Activities) for all fixed vehicle and equipment washing; including fire fighting and emergency response vehicles.
- ii. Each Permittee shall prevent discharges of wash waters from vehicle and equipment washing to the MS4 by implementing any of the following measures at existing facilities with vehicle or equipment wash areas:
 - (1) Self-contain, and haul off for disposal; or
 - (2) Equip with a clarifier or an alternative pre-treatment device and plumb to the sanitary sewer in accordance with applicable waste water provider regulations.
- iii. Each Permittee shall ensure that any municipal facilities constructed, redeveloped, or replaced shall not discharge wastewater from vehicle and equipment wash areas to the MS4 by plumbing all areas to the sanitary sewer in accordance with applicable waste water provider regulations, or self-containing all waste water/ wash water and hauling to a point of legal disposal.

g. Landscape, Park, and Recreational Facilities Management

- i. Each Permittee shall implement and maintain the activity specific BMPs listed in Table 18 for all public right-of-ways, flood control facilities and open channels, lakes and reservoirs, and landscape, park, and recreational facilities and activities.
- ii. Each Permittee shall implement an IPM program that includes the following:

- (1) Pesticides are used only if monitoring indicates they are needed, and pesticides are applied according to applicable permits and established guidelines.
 - (2) Treatments are made with the goal of removing only the target organism.
 - (3) Pest controls are selected and applied in a manner that minimizes risks to human health, beneficial non-target organisms, and the environment.
 - (4) The use of pesticides, including Organophosphates and Pyrethroids, does not threaten water quality.
 - (5) Partner with other agencies and organizations to encourage the use of IPM.
 - (6) Adopt and verifiably implement policies, procedures, and/ or ordinances requiring the minimization of pesticide use and encouraging the use of IPM techniques (including beneficial insects) for Public Agency Facilities and Activities.
 - (7) Policies, procedures, and ordinances shall include commitments and a schedule to reduce the use of pesticides that cause impairment of surface waters by implementing the following procedures:
 - (a) Prepare and annually update an inventory of pesticides used by all internal departments, divisions, and other operational units.
 - (b) Quantify pesticide use by staff and hired contractors.
 - (c) Demonstrate implementation of IPM alternatives where feasible to reduce pesticide use.
- iii. Each Permittee shall implement the following requirements:
- (1) Use a standardized protocol for the routine and non-routine application of pesticides (including pre-emergents), and fertilizers.
 - (2) Ensure there is no application of pesticides or fertilizers (1) when two or more consecutive days with greater than 50% chance of rainfall are predicted by NOAA³⁵, (2) within 48 hours of a 1/2-inch rain event, or (3) when water is flowing off the area where the application is to occur. This requirement does not apply to the application of aquatic pesticides described in Part VI.D.9.g.iii.(1) above or pesticides which require water for activation.
 - (3) Ensure that no banned or unregistered pesticides are stored or applied.
 - (4) Ensure that all staff applying pesticides are certified in the appropriate category by the California Department of Pesticide Regulation, or are under the direct supervision of a pesticide applicator certified in the appropriate category.

³⁵ www.srh.noaa.gov/forecast

- (5) Implement procedures to encourage the retention and planting of native vegetation to reduce water, pesticide and fertilizer needs; and
- (6) Store pesticides and fertilizers indoors or under cover on paved surfaces, or use secondary containment.
 - (a) Reduce the use, storage, and handling of hazardous materials to reduce the potential for spills.
 - (b) Regularly inspect storage areas.

h. Storm Drain Operation and Maintenance

- i. Each Permittee shall implement and maintain the activity specific BMPs listed in Table 18 for storm drain operation and maintenance.
- ii. Ensure that all material removed from the MS4 does not reenter the system. Solid material shall be dewatered in a contained area and liquid material shall be disposed in accordance with any of the following measures:
 - (1) Self-contain, and haul off for legal disposal; or
 - (2) Applied to the land without runoff; or
 - (3) Equip with a clarifier or an alternative pre-treatment device; and plumb to the sanitary sewer in accordance with applicable waste water provider regulations.
- iii. Catch Basin Cleaning
 - (1) In areas that are not subject to a trash TMDL, each Permittee shall determine priority areas and shall update its map or list of Catch Basins with their GPS coordinates and priority:
 - Priority A: Catch basins that are designated as consistently generating the highest volumes of trash and/or debris.
 - Priority B: Catch basins that are designated as consistently generating moderate volumes of trash and/or debris.
 - Priority C: Catch basins that are designated as generating low volumes of trash and/or debris.

The map or list shall contain the rationale or data to support priority designations.
 - (2) In areas that are not subject to a trash TMDL, each Permittee shall inspect catch basins according to the following schedule:
 - Priority A: A minimum of 3 times during the wet season (October 1 through April 15) and once during the dry season every year.
 - Priority B: A minimum of once during the wet season and once during the dry season every year.
 - Priority C: A minimum of once per year.

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Catch basins shall be cleaned as necessary on the basis of inspections. At a minimum, Permittees shall ensure that any catch basin that is determined to be at least 25% full of trash shall be cleaned out. Permittees shall maintain inspection and cleaning records for Regional Water Board review.

- (3) In areas that are subject to a trash TMDL, the subject Permittees shall implement the applicable provisions in Part VI.E.

iv. Trash Management at Public Events

- (1) Each Permittee shall require the following measures for any event in the public right of way or wherever it is foreseeable that substantial quantities of trash and litter may be generated, including events located in areas that are subject to a trash TMDL:
- (a) Proper management of trash and litter generated; and
 - (b) Arrangement for temporary screens to be placed on catch basins; or
 - (c) Provide clean out of catch basins, trash receptacles, and grounds in the event area within one business day subsequent to the event.

v. Trash Receptacles

- (1) Each Permittee shall ensure trash receptacles, or equivalent trash capturing devices, are covered in areas newly identified as high trash generation areas within its jurisdiction.
- (2) Each Permittee shall ensure that all trash receptacles are cleaned out and maintained as necessary to prevent trash overflow.

vi. Catch Basin Labels and Open Channel Signage

- (1) Each Permittee shall label all storm drain inlets that they own with a legible “no dumping” message.
- (2) Each Permittee shall inspect the legibility of the stencil or label nearest each inlet prior to the wet season every year.
- (3) Each Permittee shall record all catch basins with illegible stencils and re-stencil or re-label within 180 days of inspection.
- (4) Each Permittee shall post signs, referencing local code(s) that prohibit littering and illegal dumping, at designated public access points to open channels, creeks, urban lakes, and other relevant water bodies.

vii. Additional Trash Management Practices

- (1) In areas that are not subject to a trash TMDL, each Permittee shall install trash excluders, or equivalent devices, on or in catch basins or outfalls to prevent the discharge of trash to the MS4 or receiving water no later than four years after the effective date of this Order in areas defined as Priority A (Part VI.D.9.h.iii.(1)) except at sites where the application of such BMP(s) alone will cause flooding. Lack of maintenance that causes flooding is not an acceptable exception to the requirement to install BMPs.

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Alternatively, each Permittee may implement alternative or enhanced BMPs beyond the provisions of this Order (such as but not limited to increased street sweeping, adding trash cans near trash generation sites, prompt enforcement of trash accumulation, increased trash collection on public property, increased litter prevention messages or trash nets within the MS4) that provide substantially equivalent removal of trash. Each Permittee shall demonstrate that BMPs, which substituted for trash excluders, provide equivalent trash removal performance as excluders. When outfall trash capture is provided, revision of the schedule for inspection and cleanout of catch basins in Part VI.D.9.h.iii.(2) shall be reported in the next year's annual report.

viii. Storm Drain Maintenance

Each Permittee shall implement a program for Storm Drain Maintenance that includes the following:

- (1) Visual monitoring of Permittee-owned open channels and other drainage structures for trash and debris at least annually.
- (2) Removal of trash and debris from open channels a minimum of once per year before the wet season.
- (3) Elimination of the discharge of contaminants during MS4 maintenance and clean outs.
- (4) Proper disposal of debris and trash removed during storm drain maintenance.

ix. Infiltration from Sanitary Sewer to MS4/Preventive Maintenance

- (1) Each Permittee shall implement controls and measures to prevent and eliminate infiltration of seepage from sanitary sewers to MS4s through thorough, routine preventive maintenance of the MS4.
- (2) Each Permittee that operates both a municipal sanitary sewer system and a MS4 must implement controls and measures to prevent and eliminate infiltration of seepage from the sanitary sewers to the MS4s that must include overall sanitary sewer and MS4 surveys and thorough, routine preventive maintenance of both. Implementation of a Sewer System Management Plan in accordance with the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, may be used to fulfill this requirement.
- (3) Each Permittee shall implement controls to limit infiltration of seepage from sanitary sewers to the MS4 where necessary. Such controls must include:
 - (a) Adequate plan checking for construction and new development;
 - (b) Incident response training for its municipal employees that identify sanitary sewer spills;
 - (c) Code enforcement inspections;

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- (d) MS4 maintenance and inspections;
 - (e) Interagency coordination with sewer agencies; and
 - (f) Proper education of its municipal staff and contractors conducting field operations on the MS4 or its municipal sanitary sewer (if applicable).
- x. Permittee Owned Treatment Control BMPs
- (1) Each Permittee shall implement an inspection and maintenance program for all Permittee owned treatment control BMPs, including post-construction treatment control BMPs.
 - (2) Each Permittee shall ensure proper operation of all treatment control BMPs and maintain them as necessary for proper operation, including all post-construction treatment control BMPs.
 - (3) Any residual water³⁶ produced by a treatment control BMP and not being internal to the BMP performance when being maintained shall be:
 - (a) Hauled away and legally disposed of; or
 - (b) Applied to the land without runoff; or
 - (c) Discharged to the sanitary sewer system (with permits or authorization); or
 - (d) Treated or filtered to remove bacteria, sediments, nutrients, and meet the limitations set in Table 19 (Discharge Limitations for Dewatering Treatment BMPs), prior to discharge to the MS4.

Table 19. Discharge Limitations for Dewatering Treatment BMPs³⁷

Parameter	Units	Limitation
Total Suspended Solids	mg/L	100
Turbidity	NTU	50
Oil and Grease	mg/L	10

i. Streets, Roads, and Parking Facilities Maintenance

- i. Each Permittee shall designate streets and/or street segments within its jurisdiction as one of the following:
 - Priority A: Streets and/or street segments that are designated as consistently generating the highest volumes of trash and/or debris.
 - Priority B: Streets and/or street segments that are designated as consistently generating moderate volumes of trash and/or debris.
 - Priority C: Streets and/or street segments that are designated as generating low volumes of trash and/or debris.

³⁶ See Attachment A.

³⁷ Technology based effluent limitations.

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- ii. Each Permittee shall perform street sweeping of curbed streets according to the following schedule:

Priority A: Streets and/or street segments that are designated as Priority A shall be swept at least two times per month.

Priority B: Streets and/or street segments that are designated as Priority B shall be swept at least once per month.

Priority C: Streets and/or street segments that are designated as Priority C shall be swept as necessary but in no case less than once per year.

- iii. Road Reconstruction

Each Permittee shall require that for any project that includes roadbed or street paving, repaving, patching, digouts, or resurfacing roadbed surfaces, that the following BMPs be implemented for each project.

- (1) Restrict paving and repaving activity to exclude periods of rainfall or predicted rainfall³⁸ unless required by emergency conditions.
- (2) Install sand bags or gravel bags and filter fabric at all susceptible storm drain inlets and at manholes to prevent spills of paving products and tack coat;
- (3) Prevent the discharge of release agents including soybean oil, other oils, or diesel into the MS4 or receiving waters.
- (4) Prevent non-storm water runoff from water use for the roller and for evaporative cooling of the asphalt.
- (5) Clean equipment over absorbent pads, drip pans, plastic sheeting or other material to capture all spillage and dispose of properly.
- (6) Collect liquid waste in a container, with a secure lid, for transport to a maintenance facility to be reused, recycled or disposed of properly.
- (7) Collect solid waste by vacuuming or sweeping and securing in an appropriate container for transport to a maintenance facility to be reused, recycled or disposed of properly.
- (8) Cover the "cold-mix" asphalt (i.e., pre-mixed aggregate and asphalt binder) with protective sheeting during a rainstorm.
- (9) Cover loads with tarp before haul-off to a storage site, and do not overload trucks.
- (10) Minimize airborne dust by using water spray during grinding.
- (11) Avoid stockpiling soil, sand, sediment, asphalt material and asphalt grindings materials or rubble in or near MS4 or receiving waters.
- (12) Protect stockpiles with a cover or sediment barriers during a rain.

³⁸ A probability of precipitation (POP) of 50% is required.

iv. Parking Facilities Maintenance

- (1) Permittee-owned parking lots exposed to storm water shall be kept clear of debris and excessive oil buildup and cleaned no less than 2 times per month and/or inspected no less than 2 times per month to determine if cleaning is necessary. In no case shall a Permittee-owned parking lot be cleaned less than once a month.

j. Emergency Procedures

- i. Each Permittee may conduct repairs of essential public service systems and infrastructure in emergency situations with a self-waiver of the provisions of this Order as follows:
 - (1) The Permittee shall abide by all other regulatory requirements, including notification to other agencies as appropriate.
 - (2) Where the self-waiver has been invoked, the Permittee shall submit to the Regional Water Board Executive Officer a statement of the occurrence of the emergency, an explanation of the circumstances, and the measures that were implemented to reduce the threat to water quality, no later than 30 business days after the situation of emergency has passed.
 - (3) Minor repairs of essential public service systems and infrastructure in emergency situations (that can be completed in less than three days) are not subject to the notification provisions. Appropriate BMPs to reduce the threat to water quality shall be implemented.

k. Municipal Employee and Contractor Training

- i. Each Permittee shall, no later than 1 year after Order adoption and annually thereafter before June 30, train all of their employees in targeted positions (whose interactions, jobs, and activities affect storm water quality) on the requirements of the overall storm water management program, or shall ensure contractors performing privatized/contracted municipal services are appropriately trained to:
 - (1) Promote a clear understanding of the potential for activities to pollute storm water.
 - (2) Identify opportunities to require, implement, and maintain appropriate BMPs in their line of work.

Outside contractors can self-certify, providing they certify they have received all applicable training required in the Permit and have documentation to that effect.
- ii. Each Permittee shall, no later than 1 year after Order adoption and annually thereafter before June 30, train all of their employees and contractors who use or have the potential to use pesticides or fertilizers (whether or not they normally apply these as part of their work). Training programs shall address:
 - (1) The potential for pesticide-related surface water toxicity.

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- (2) Proper use, handling, and disposal of pesticides.
- (3) Least toxic methods of pest prevention and control, including IPM.
- (4) Reduction of pesticide use.

iii. Outside contractors can self-certify, providing they certify they have received all applicable training required in the Permit and have documentation to that effect.

10. Illicit Connections and Illicit Discharges Elimination Program

a. General

- i. Each Permittee shall continue to implement an Illicit Connection and Illicit Discharge Elimination (IC/ID) Program to detect, investigate, and eliminate IC/IDs to the MS4. The IC/ID Program must be implemented in accordance with the requirements and performance measures specified in this Order.
- ii. As stated in Part VI.A.2 of this Order, each Permittee must have adequate legal authority to prohibit IC/IDs to the MS4 and enable enforcement capabilities to eliminate the source of IC/IDs.
- iii. Each Permittee’s IC/ID Program shall consist of at least the following major program components:
 - (1) Procedures for conducting source investigations for IC/IDs
 - (2) Procedures for eliminating the source of IC/IDs
 - (3) Procedures for public reporting of illicit discharges
 - (4) Spill response plan
 - (5) IC/IDs education and training for Permittee staff

b. Illicit Discharge Source Investigation and Elimination

- i. Each Permittee shall develop written procedures for conducting investigations to identify the source of all suspected illicit discharges, including procedures to eliminate the discharge once the source is located.
- ii. At a minimum, each Permittee shall initiate an investigation(s) to identify and locate the source within 72 hours of becoming aware of the illicit discharge.
- iii. When conducting investigations, each Permittee shall comply with the following:
 - (1) Illicit discharges suspected of being sanitary sewage and/or significantly contaminated shall be investigated first.
 - (2) Each Permittee shall track all investigations to document at a minimum the date(s) the illicit discharge was observed; the results of the investigation; any follow-up of the investigation; and the date the investigation was closed.

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- (3) Each Permittee shall investigate the source of all observed illicit discharges.
- iv. When taking corrective action to eliminate illicit discharges, each Permittee shall comply with the following:
- (1) If the source of the illicit discharge has been determined to originate within the Permittee's jurisdiction, the Permittee shall immediately notify the responsible party/parties of the problem, and require the responsible party to initiate all necessary corrective actions to eliminate the illicit discharge. Upon being notified that the discharge has been eliminated, the Permittee shall conduct a follow-up investigation to verify that the discharge has been eliminated and cleaned-up to the satisfaction of the Permittee(s). Each Permittee shall document its follow-up investigation. Each Permittee may seek recovery and remediation costs from responsible parties or require compensation for the cost of all inspection, investigation, cleanup and oversight activities. Resulting enforcement actions shall follow the program's Progressive Enforcement Policy, per Part VI.D.2.
 - (2) If the source of the illicit discharge has been determined to originate within an upstream jurisdiction, the Permittee shall notify the upstream jurisdiction and the Regional Water Board within 30 days of such determination and provide all of the information collected regarding efforts to identify its source. Each Permittee may seek recovery and remediation costs from responsible parties or require compensation for the cost of all inspection, investigation, cleanup and oversight activities. Resulting enforcement actions shall follow the program's Progressive Enforcement Policy, per Part VI.D.2.
 - (3) If the source of the illicit discharge cannot be traced to a suspected responsible party, affected Permittees shall implement its spill response plan and then initiate a permanent solution as described in section 10.b.v below.
- v. In the event the Permittee is unable to eliminate an ongoing illicit discharge following full execution of its legal authority and in accordance with its Progressive Enforcement Policy, or other circumstances prevent the full elimination of an ongoing illicit discharge, including the inability to find the responsible party/parties, the Permittee shall provide for diversion of the entire flow to the sanitary sewer or provide treatment. In either instance, the Permittee shall notify the Regional Water Board in writing within 30 days of such determination and shall provide a written plan for review and comment that describes the efforts that have been undertaken to eliminate the illicit discharge, a description of the actions to be undertaken, anticipated costs, and a schedule for completion.

c. Identification and Response to Illicit Connections

i. Investigation

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Each Permittee, upon discovery or upon receiving a report of a suspected illicit connection, shall initiate an investigation within 21 days, to determine the following: (1) source of the connection, (2) nature and volume of discharge through the connection, and (3) responsible party for the connection.

ii. Elimination

Each Permittee, upon confirmation of an illicit MS4 connection, shall ensure that the connection is:

- (1) Permitted or documented, provided the connection will only discharge storm water and non-storm water allowed under this Order or other individual or general NPDES Permits/WDRs, or
- (2) Eliminated within 180 days of completion of the investigation, using its formal enforcement authority, if necessary, to eliminate the illicit connection.

iii. Documentation

Formal records must be maintained for all illicit connection investigations and the formal enforcement taken to eliminate illicit connections.

d. Public Reporting of Non-Storm Water Discharges and Spills

- i.** Each Permittee shall promote, publicize, and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into or from MS4s through a central contact point, including phone numbers and an internet site for complaints and spill reporting. Each Permittee shall also provide the reporting hotline to Permittee staff to leverage the field staff that has direct contact with the MS4 in detecting and eliminating illicit discharges.
- ii.** Each Permittee shall implement the central point of contact and reporting hotline requirements listed in this part in one or more of the following methods:
 - (1) By participating in a County-wide sponsored hotline
 - (2) By participating in one or more Watershed Group sponsored hotlines
 - (3) Or individually within its own jurisdiction
 - (4) The LACFCD shall, in collaboration with the County, continue to maintain the 888-CLEAN-LA hotline and internet site to promote, publicize, and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into or from MS4s.
- iii.** Each Permittee shall ensure that signage adjacent to open channels, as required in Part F.8.h.vi, include information regarding dumping prohibitions and public reporting of illicit discharges.
- iv.** Each Permittee shall develop and maintain written procedures that document how complaint calls are received, documented, and tracked to ensure that all complaints are adequately addressed. The procedures shall be evaluated to determine whether changes or updates are needed to ensure that the

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procedures accurately document the methods employed by the Permittee. Any identified changes shall be made to the procedures subsequent to the evaluation.

- v. Each Permittee shall maintain documentation of the complaint calls and record the location of the reported spill or IC/ ID and the actions undertaken in response to all IC/ID complaints, including referrals to other agencies.

e. Spill Response Plan

- i. Each Permittee shall implement a spill response plan for all sewage and other spills that may discharge into its MS4. The spill response plan shall clearly identify agencies responsible for spill response and cleanup, telephone numbers and e-mail address for contacts, and shall contain at a minimum the following requirements:
 - (1) Coordination with spill response teams throughout all appropriate departments, programs and agencies so that maximum water quality protection is provided.
 - (2) Initiate investigation of all public and employee spill complaints within one business day of receiving the complaint to assess validity.
 - (3) Response to spills for containment within 4 hours of becoming aware of the spill, except where such spills occur on private property, in which case the response should be within 2 hours of gaining legal access to the property.
 - (4) Spills that may endanger health or the environment shall be reported to appropriate public health agencies and the Office of Emergency Services (OES).

f. Illicit Connection and Illicit Discharge Education and Training

- i. Each Permittee must continue to implement a training program regarding the identification of IC/IDs for all municipal field staff, who, as part of their normal job responsibilities (e.g., street sweeping, storm drain maintenance, collection system maintenance, road maintenance), may come into contact with or otherwise observe an illicit discharge or illicit connection to the MS4. Contact information, including the procedure for reporting an illicit discharge, must be readily available to field staff. Training program documents must be available for review by the permitting authority.
 - ii. Each Permittee shall ensure contractors performing privatized/contracted municipal services such as, but not limited to, storm and/or sanitary sewer system inspection and repair, street sweeping, trash pick-up and disposal, and street and right-of-way construction and repair are trained regarding IC/ID identification and reporting. Permittees may provide training or include contractual requirements for IC/ID identification and reporting training. Outside contractors can self-certify, providing they

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certify they have received all applicable training required in the Permit and have documentation to that effect.

- iii. Each Permittee’s training program should address, at a minimum, the following:
 - (1) IC/ID identification, including definitions and examples,
 - (2) investigation,
 - (3) elimination,
 - (4) cleanup,
 - (5) reporting, and
 - (6) documentation.
- iv. Each Permittee must create a list of applicable positions and contractors which require IC/ID training and ensure that training is provided at least twice during the term of the Order. Each Permittee must maintain documentation of the training activities.
- v. New Permittee staff members must be provided with IC/ID training within 180 days of starting employment.

E. Total Maximum Daily Load Provisions

- 1. The provisions of this Part VI.E. implement and are consistent with the assumptions and requirements of all waste load allocations (WLAs) established in TMDLs for which some or all of the Permittees in this Order are responsible.
 - a. Part VI.E of this Order includes provisions that are designed to assure that Permittees achieve WLAs and meet other requirements of TMDLs covering receiving waters impacted by the Permittees’ MS4 discharges. TMDL provisions are grouped by WMA (WMA) in Attachments L through R.
 - b. The Permittees subject to each TMDL are identified in Attachment K.
 - c. The Permittees shall comply with the applicable water quality-based effluent limitations and/or receiving water limitations contained in Attachments L through R, consistent with the assumptions and requirements of the WLAs established in the TMDLs, including implementation plans and schedules, where provided for in the State adoption and approval of the TMDL (40 CFR §122.44(d)(1)(vii)(B); Cal. Wat. Code §13263(a)).
 - d. A Permittee may comply with water quality-based effluent limitations and/or receiving water limitations in Attachments L through R using any lawful means.

2. Compliance Determination

a. General

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- i. A Permittee shall demonstrate compliance at compliance monitoring points established in each TMDL or, if not specified in the TMDL, at locations identified in an approved TMDL monitoring plan or in accordance with an approved integrated monitoring program per Attachment E, Part VI.C.5 (Integrated Watershed Monitoring and Assessment).
- ii. Compliance with water quality-based effluent limitations shall be determined as described in Parts VI.E.2.d and VI.E.2.e, or for trash water quality-based effluent limitations as described in Part VI.E.5.b, or as otherwise set forth in TMDL specific provisions in Attachments L through R.
- iii. Pursuant to Part VI.C, a Permittee may, individually or as part of a watershed-based group, develop and submit for approval by the Regional Water Board Executive Officer a Watershed Management Program that addresses all water quality-based effluent limitations and receiving water limitations to which the Permittee is subject pursuant to established TMDLs.

b. Commingled Discharges

- i. A number of the TMDLs establish WLAs that are assigned jointly to a group of Permittees whose storm water and/or non-storm water discharges are or may be commingled in the MS4 prior to discharge to the receiving water subject to the TMDL.
- ii. In these cases, pursuant to 40 CFR section 122.26(a)(3)(vi), each Permittee is only responsible for discharges from the MS4 for which they are owners and/or operators.
- iii. Where Permittees have commingled discharges to the receiving water, compliance at the outfall to the receiving water or in the receiving water shall be determined for the group of Permittees as a whole unless an individual Permittee demonstrates that its discharge did not cause or contribute to the exceedance, pursuant to subpart v. below.
- iv. For purposes of compliance determination, each Permittee is responsible for demonstrating that its discharge did not cause or contribute to an exceedance of an applicable water quality-based effluent limitation(s) at the outfall or receiving water limitation(s) in the target receiving water.
- v. A Permittee may demonstrate that its discharge did not cause or contribute to an exceedance of an applicable water quality-based effluent limitation or receiving water limitation in any of the following ways:

- (1) Demonstrate that there is no discharge from the Permittee's MS4 into the applicable receiving water during the time period subject to the water quality-based effluent limitation and/or receiving water limitation; or

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- (2) Demonstrate that the discharge from the Permittee's MS4 is controlled to a level that does not exceed the applicable water quality-based effluent limitation; or
- (3) For exceedances of bacteria receiving water limitations or water quality-based effluent limitations, demonstrate through a source investigation pursuant to protocols established under California Water Code section 13178 or for exceedances of other receiving water limitations or water quality-based effluent limitations, demonstrate using other accepted source identification protocols, that pollutant sources within the jurisdiction of the Permittee or the Permittee's MS4 have not caused or contributed to the exceedance of the Receiving Water Limitation(s).

c. Receiving Water Limitations Addressed by a TMDL

- i. For receiving water limitations in Part V.A. associated with water body-pollutant combinations addressed in a TMDL, Permittees shall achieve compliance with the receiving water limitations in Part V.A. as outlined in this Part VI.E. and Attachments L through R of this Order.
- ii. A Permittee's ~~shall not be considered in violation of Part V.A. of this Order for the specific pollutant addressed in the TMDL, if it is in full~~ compliance with the applicable TMDL requirement(s), including compliance schedules, of this Part VI.E. and Attachments L through R constitutes compliance with Part V.A. of this Order for the specific pollutant addressed in the TMDL.
- iii. As long as a Permittee is in compliance with the applicable TMDL requirements in a time schedule order (TSO) issued by the Regional Water Board pursuant to California Water Code sections 13300 and 13385(j)(3), it is not the Regional Water Board's intention to take an enforcement action for violations of Part V.A. of this Order for the specific pollutant(s) addressed in the TSO.

d. Interim Water Quality-Based Effluent Limitations and Receiving Water Limitations

- i. A Permittee shall be considered in compliance with an applicable interim water quality-based effluent limitation and interim receiving water limitation for a pollutant associated with a specific TMDL if any of the following is demonstrated:
 - (1) There are no violations of the interim water quality-based effluent limitation for the pollutant associated with a specific TMDL at the Permittee's applicable MS4 outfall(s),³⁹ including an outfall to the receiving water that collects discharges from multiple Permittees' jurisdictions;

³⁹ An outfall may include a manhole or other point of access to the MS4 at the Permittee's jurisdictional boundary.

- (2) There are no exceedances of the applicable receiving water limitation for the pollutant associated with a specific TMDL in the receiving water(s) at, or downstream of, the Permittee's outfall(s);
- (3) There is no direct or indirect discharge from the Permittee's MS4 to the receiving water during the time period subject to the water quality-based effluent limitation and/or receiving water limitation for the pollutant associated with a specific TMDL; or
- (4) The Permittee has submitted and is fully implementing an approved Watershed Management Program or EWMP pursuant to Part VI.C ~~that provides reasonable assurance that interim water quality-based effluent limitations will be achieved per applicable compliance schedules.~~
- (a) To be considered fully implementing an approved Watershed Management Program or EWMP, a Permittee must be implementing all actions consistent with the approved program and applicable compliance schedules, including structural BMPs.
- (b) Structural storm water BMPs or systems of BMPs should be designed and maintained to treat storm water runoff from the 85th percentile, 24-hour storm, where feasible and necessary to achieve applicable WQBELs and receiving water limitations, and maintenance records must be up-to-date and available for inspection by the Regional Water Board.
- (c) A Permittee that does not implement the Watershed Management Program in accordance with the milestones and compliance schedules shall demonstrate compliance with its interim water quality-based effluent limitations and/or receiving water limitations pursuant to Part VI.E.2.d.i.(1)-(3), above.
- (d) Upon notification of a Permittee's intent to develop a WMP or EWMP and prior to approval of its WMP or EWMP, A a Permittee's full compliance with all of the following requirements shall not be considered in violation of constitute a Permittee's compliance with provisions pertaining to interim WQBELs with compliance deadlines occurring prior to approval of a WMP or EWMP. This subdivision (d) shall not apply to interim trash WQBELs, if all the following requirements are met:
- (1) Provides timely notice of its intent to develop a WMP or EWMP,
 - (2) Meets all interim and final deadlines for submittal development of a WMP or EWMP,
 - (3) ~~Implements watershed control measures identified in its notification to achieve interim WQBELs with compliance deadlines~~

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~~occurring prior to approval of a WMP~~ For the area to be covered by the WMP or EWMP, targets implementation of watershed control measures in its existing storm water management program, including watershed control measures to eliminate non-storm water discharges of pollutants through the MS4 to receiving waters, to address known contributions of pollutants from MS4 discharges that cause or contribute to the impairment(s) addressed by the TMDL(s), and

- (4) Receives final approval of its WMP or EWMP within 28 or 40 months, respectively.

e. Final Water Quality-based Effluent Limitations and/or Receiving Water Limitations

i. A Permittee shall be deemed in compliance with an applicable final water quality-based effluent limitation and final receiving water limitation for the pollutant(s) associated with a specific TMDL if any of the following is demonstrated:

- (1) There are no violations of the final water quality-based effluent limitation for the specific pollutant at the Permittee’s applicable MS4 outfall(s)⁴⁰;
- (2) There are no exceedances of applicable receiving water limitation for the specific pollutant in the receiving water(s) at, or downstream of, the Permittee’s outfall(s); ~~or~~
- (3) There is no direct or indirect discharge from the Permittee’s MS4 to the receiving water during the time period subject to the water quality-based effluent limitation and/or receiving water limitation for the pollutant(s) associated with a specific TMDL; or

~~(3)~~(4) In drainage areas where Permittees are implementing an EWMP, (i) all non-storm water and (ii) all storm water runoff up to and including the volume equivalent to the 85th percentile, 24-hour event is retained for the drainage area tributary to the applicable receiving water. This provision (4) shall not apply to final trash WQBELs.

3. USEPA Established TMDLs

TMDLs established by the USEPA, to which Permittees are subject, do not contain an implementation plan adopted pursuant to California Water Code section 13242. However, USEPA has included implementation recommendations as part of these TMDLs. In lieu of inclusion of numeric water quality based effluent limitations at this time, this Order requires Permittees subject to WLAs in USEPA established TMDLs to propose and implement best management practices (BMPs) that will be effective

⁴⁰ Ibid.

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in ~~ultimately~~ achieving compliance with the USEPA established numeric WLAs. The Regional Water Board may, at its discretion, revisit this decision within the term of this Order or in a future permit, as more information is developed to support the inclusion of numeric water quality based effluent limitations.

- a. Each Permittee shall propose BMPs to achieve the WLAs contained in the applicable USEPA established TMDL(s), and a schedule for implementing the BMPs that is as short as possible, in a Watershed Management Program or EWMP.
- b. Each Permittee may either individually submit a Watershed Management Program ~~Plan~~, or may jointly submit a ~~plan~~ WMP or EWMP with other Permittees subject to the WLAs contained in the USEPA established TMDL.
- c. At a minimum, each Permittee shall include the following information in its Watershed Management Program or EWMP ~~Plan~~, relevant to each applicable USEPA established TMDL:
 - i. Available data demonstrating the current quality of the Permittee's MS4 discharge(s) in terms of concentration and/or load of the target pollutant(s) to the receiving waters subject to the TMDL;
 - ii. A detailed description of BMPs that have been implemented, and/or are currently being implemented by the Permittee to achieve the WLA(s), if any;
 - iii. A detailed time schedule of specific actions the Permittee will take in order to achieve compliance with the applicable WLA(s);
 - iv. A demonstration that the time schedule requested is as short as possible, taking into account the time since USEPA establishment of the TMDL, and technological, operation, and economic factors that affect the design, development, and implementation of the control measures that are necessary to comply with the WLA(s);
 - (1) For the Malibu Creek Nutrient TMDL established by USEPA in 2003, in no case shall the time schedule to achieve the final numeric WLAs exceed five years from the effective date of this Order; and
 - v. If the requested time schedule exceeds one year, the proposed schedule shall include interim requirements and numeric milestones and the date(s) for their achievement.
- d. Each Permittee subject to a WLA in a TMDL established by USEPA ~~since January 1, 2010~~ shall submit a draft of a Watershed Management Program or EWMP ~~Plan~~ to the Regional Water Board Executive Officer for approval ~~no later than one year after the effective date of this Order~~ per the schedule Part VI.C.4.

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~~e. Each Permittee subject to a WLA in a TMDL established by USEPA prior to January 1, 2010 shall submit a draft of a Watershed Management Program Plan to the Regional Water Board Executive Officer for approval no later than six months after the effective date of this Order.~~

e. If a Permittee does not submit a Watershed Management Program ~~Plan~~, or the plan is determined to be inadequate by the Regional Water Board Executive Officer and the Permittee does not make the necessary revisions within 90 days of written notification that plan is inadequate, the Permittee shall be required to demonstrate compliance with the numeric WLAs immediately based on monitoring data collected under the MRP (Attachment E) for this Order.

4. State Adopted TMDLs where Final Compliance Deadlines have Passed

- a. Permittees shall comply immediately with water quality-based effluent limitations and/or receiving water limitations to implement WLAs in state-adopted TMDLs for which final compliance deadlines have passed pursuant to the TMDL implementation schedule.
- b. Where a Permittee believes that additional time to comply with the final water quality-based effluent limitations and/or receiving water limitations is necessary, a Permittee may within 45 days of Order adoption request a time schedule order pursuant to California Water Code section 13300 for the Regional Water Board's consideration.
- c. Permittees may either individually request a TSO, or may jointly request a TSO with all Permittees subject to the water quality-based effluent limitations and/or receiving water limitations, to implement the WLAs in the state-adopted TMDL.
- d. At a minimum, a request for a time schedule order shall include the following:
 - i. Data demonstrating the current quality of the MS4 discharge(s) in terms of concentration and/or load of the target pollutant(s) to the receiving waters subject to the TMDL;
 - ii. A detailed description and chronology of structural controls and source control efforts, since the effective date of the TMDL, to reduce the pollutant load in the MS4 discharges to the receiving waters subject to the TMDL;
 - iii. Justification of the need for additional time to achieve the water quality-based effluent limitations and/or receiving water limitations;
 - iv. A detailed time schedule of specific actions the Permittee will take in order to achieve the water quality-based effluent limitations and/or receiving water limitations;
 - v. A demonstration that the time schedule requested is as short as possible, taking into account the technological, operation, and economic factors that

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affect the design, development, and implementation of the control measures that are necessary to comply with the effluent limitation(s); and

- vi. If the requested time schedule exceeds one year, the proposed schedule shall include interim requirements and the date(s) for their achievement. The interim requirements shall include both of the following:

- (1) Effluent limitation(s) for the pollutant(s) of concern; and

- (2) Actions and milestones leading to compliance with the effluent limitation(s).

5. Water Quality-Based Effluent Limitations for Trash

Permittees assigned a Waste Load Allocation in a trash TMDL shall comply as set forth below.

- a. **Effluent Limitations:** Permittees shall comply with the interim and final water quality-based effluent limitations for trash set forth in Attachments L through R for the following Trash TMDLs:

- i. Lake Elizabeth Trash TMDL (Attachment L)
- ii. Santa Monica Bay Nearshore and Offshore Debris TMDL (Attachment M)
- iii. Malibu Creek Watershed Trash TMDL (Attachment M)
- iv. Ballona Creek Trash TMDL (Attachment M)
- v. Machado Lake Trash TMDL (Attachment N)
- vi. Los Angeles River Trash TMDL (Attachment O)
- vii. Peck Road Park Lake Trash TMDL (Attachment O)
- viii. Echo Park Lake Trash TMDL (Attachment O)
- ix. Legg Lake Trash TMDL (Attachment O)

b. Compliance

- i. Pursuant to California Water Code section 13360(a), Permittees may comply with the trash effluent limitations using any lawful means. Such compliance options are broadly classified as *full capture*, *partial capture*, *institutional controls*, or *minimum frequency of assessment and collection*, as described below, and any combination of these may be employed to achieve compliance:

- (1) Full Capture Systems:

- (a) The Basin Plan authorizes the Regional Water Board Executive Officer to certify *full capture systems*, which are systems that meet the

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operating and performance requirements as described in this Order, and the procedures identified in “Procedures and Requirements for Certification of a Best Management Practice for Trash Control as a Full Capture System.”⁴¹

- (b) Permittees are authorized to comply with their effluent limitations through certified *full capture systems* provided the requirements of paragraph (c), immediately below, and any conditions in the certification, continue to be met.
- (c) Permittees may comply with their effluent limitations through progressive installation of *full capture systems* throughout their jurisdictional areas until all areas draining to Lake Elizabeth, Santa Monica Bay, Malibu Creek, Ballona Creek, Machado Lake, the Los Angeles River system, Legg Lake, Peck Road Park Lake, and/or Echo Park Lake are addressed. For purposes of this Order, attainment of the effluent limitations shall be conclusively presumed for any drainage area to Lake Elizabeth, Santa Monica Bay, Malibu Creek (and its tributaries), Ballona Creek (and its tributaries), Machado Lake, the Los Angeles River (and its tributaries), Legg Lake, Peck Road Park Lake, and/or Echo Park Lake where certified *full capture systems* treat all drainage from the area, provided that the *full capture systems* are adequately sized and maintained, and that maintenance records are up-to-date and available for inspection by the Regional Water Board.
- (i) A Permittee shall be deemed in compliance with its final effluent limitation if it demonstrates that all drainage areas under its jurisdiction and/or authority are serviced by appropriate certified *full capture systems* as described in paragraph (1)(c).
- (ii) A Permittee shall be deemed in compliance with its interim effluent limitations, where applicable:
1. By demonstrating that *full capture systems* treat the percentage of drainage areas in the watershed that corresponds to the required trash abatement.
 2. Alternatively, a Permittee may propose a schedule for installation of *full capture systems* in areas under its jurisdiction and/or authority within a given watershed, targeting first the areas of greatest trash generation, for the Executive Officer’s approval. The Executive Officer shall not approve any such schedule that does not result in timely compliance with the final effluent limitations, consistent with the established TMDL implementation schedule and applicable

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⁴¹ The Regional Water Board currently recognizes eight *full capture systems*. These are: Vortex Separation Systems (VSS) and seven other Executive Officer certified *full capture systems*, including specific types or designs of trash nets; two gross solids removal devices (GSRDs); catch basin brush inserts and mesh screens; vertical and horizontal trash capture screen inserts; and a connector pipe screen device. See August 3, 2004 Los Angeles Regional Water Quality Control Board Memorandum titled “Procedures and Requirements for Certification of a Best Management Practice for Trash Control as a Full Capture System.”

State policies. A Permittee shall be deemed in compliance with its interim effluent limitations provided it is fully in compliance with any such approved schedule.

(2) Partial Capture Devices and Institutional Controls: Permittees may comply with their interim and final effluent limitations through the installation of *partial capture devices* and the application of *institutional controls*.⁴²

(a) Trash discharges from areas serviced solely by *partial capture devices* may be estimated based on demonstrated performance of the device(s) in the implementing area.⁴³ That is, trash reduction is equivalent to the *partial capture devices'* trash removal efficiency multiplied by the percentage of drainage area serviced by the devices.

(b) Except as provided in subdivision (c), immediately below, trash discharges from areas addressed by *institutional controls* and/or *partial capture devices* (where site-specific performance data is not available) shall be calculated using a mass balance approach, based on the daily generation rate (DGR) for a representative area.⁴⁴ The DGR shall be determined from direct measurement of trash deposited in the drainage area during any thirty-day period between June 22nd and September 22nd exclusive of rain events⁴⁵, and shall be re-calculated every year thereafter unless a less frequent period for recalculation is approved by the Regional Water Board Executive Officer. The DGR shall be calculated as the total amount of trash collected during this period divided by the length of the collection period.

DGR = (Amount of trash collected during a 30-day collection period)⁴⁶ / (30 days)

The DGR for the applicable area under the Permittees' jurisdiction and/or authority shall be extrapolated from that of the representative drainage area(s). A mass balance equation shall be used to estimate the amount of trash discharged during a storm event.⁴⁷ The *Storm Event Trash Discharge* for a given rain event in the Permittee's drainage area shall be calculated by multiplying the number of days since the last street sweeping by the DGR and subtracting the amount of any trash recovered in the catch basins.⁴⁸ For each day of a storm event that generates precipitation greater than 0.25 inch, the Permittee shall calculate a *Storm Event Trash Discharge*.

⁴² While interim effluent limitations may be complied with using *partial capture devices*, compliance with final effluent limitations cannot be achieved with the exclusive use of *partial capture devices*.

⁴³ Performance shall be demonstrated under different conditions (e.g. low to high trash loading).

⁴⁴ The area(s) should be representative of the land uses and activities within the Permittees' authority and shall be approved by the Executive Officer prior to the 30-day collection period.

⁴⁵ Provided no special events are scheduled that may affect the representative nature of that collection period.

⁴⁶ Between June 22nd and September 22nd

⁴⁷ Amount of trash shall refer to the uncompressed volume (in gallons) or drip-dry weight (in pounds) of trash collected.

⁴⁸ Any negative values shall be considered to represent a zero discharge.

Storm Event Trash Discharge = [(Days since last street sweeping*DGR)] – [Amount of trash recovered from catch basins]⁴⁹

The sum of the *Storm Event Trash Discharges* for the storm year shall be the Permittee’s calculated annual trash discharge.

Total Storm Year Trash Discharge = ∑Storm Event Trash Discharges from Drainage Area

(c) The Executive Officer may approve alternative compliance monitoring approaches for calculating total storm year trash discharge, upon finding that the program will provide a scientifically-based estimate of the amount of trash discharged from the Permittee’s MS4.

(3) Combined Compliance Approaches:

Permittees may comply with their interim and final effluent limitations through a combination of *full capture systems, partial capture devices, and institutional controls*. Where a Permittee relies on a combination of approaches, it shall demonstrate compliance with the interim and final effluent limitations as specified in (1)(c) in areas where *full capture systems* are installed and as specified in (2)(a) or (2)(b), as appropriate, in areas where *partial capture devices* and *institutional controls* are applied.

(4) Minimum Frequency of Assessment and Collection Approach:

If allowed in a trash TMDL and approved by the Executive Officer, a Permittee may alternatively comply with its final effluent limitations by implementing a program for *minimum frequency of assessment and collection* (MFAC) in conjunction with BMPs. To the satisfaction of the Executive Officer, the MFAC/BMP program must meet the following criteria:

(a) The MFAC/BMP Program includes an initial minimum frequency of trash assessment and collection and suite of structural and/or nonstructural BMPs. The MFAC/BMP program shall include collection and disposal of all trash found in the receiving water and shoreline. Permittees shall implement an initial suite of BMPs based on current trash management practices in land areas that are found to be sources of trash to the water body. The initial minimum frequency of trash assessment and collection shall be set as specified in the following TMDLs:

- (i) Malibu Creek Watershed Trash TMDL
- (ii) Machado Lake Trash TMDL
- (iii) Legg Lake Trash TMDL

⁴⁹ When more than one storm event occurs prior to the next street sweeping the discharge shall be calculated from the date of the last assessment.

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- (b) The MFAC/BMP Program includes reasonable assurances that it will be implemented by the responsible Permittees.
 - (c) MFAC protocols may be based on SWAMP protocols for rapid trash assessment, or alternative protocols proposed by Permittees and approved by the Regional Water Board Executive Officer.
 - (d) Implementation of the MFAC/BMP program should include a Health and Safety Program to protect personnel. The MFAC/BMP program shall not require Permittees to access and collect trash from areas where personnel are prohibited.
 - (e) The Regional Water Board Executive Officer may approve or require a revised assessment and collection frequency and definition of the critical conditions under the MFAC:
 - (i) To prevent trash from accumulating in deleterious amounts that cause nuisance or adversely affect beneficial uses between collections;
 - (ii) To reflect the results of trash assessment and collection;
 - (iii) If the amount of trash collected does not show a decreasing trend, where necessary, such that a shorter interval between collections is warranted; or
 - (iv) If the amount of trash collected is decreasing such that a longer interval between collections is warranted.
 - (f) At the end of the implementation period, a revised MFAC/BMP program may be required if the Regional Water Board Executive Officer determines that the amount of trash accumulating between collections is causing nuisance or otherwise adversely affecting beneficial uses.
 - (g) With regard to (4)(e)(i), (4)(e)(ii), or (4)(e)(iii), above, the Regional Water Board Executive Officer is authorized to allow responsible Permittees to implement additional structural or non-structural BMPs in lieu of modifying the monitoring frequency.
- ii. If a Permittee is not in compliance with its applicable interim and/or final effluent limitation as identified in Attachments L through R, then it shall be in violation of this Order.
- (1) A Permittee relying on *partial capture devices* and/or *institutional controls* that has violated its interim and/or final effluent limitation(s) shall be presumed to have violated the applicable limitation for each day of each storm event that generated precipitation greater than 0.25 inch during the applicable storm year, except those storm days on which it establishes that its cumulative Storm Event Trash Discharges has not exceeded the applicable effluent limitation.

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(2) If a Permittee relying on *full capture systems* has failed to demonstrate that the *full capture systems* for any drainage area are adequately sized and maintained, and that maintenance records are up-to-date and available for inspection by the Regional Water Board, and that it is in compliance with any conditions of its certification, shall be presumed to have discharged trash in an amount that corresponds to the percentage of the baseline waste load allocation represented by the drainage area in question.

(a) A Permittee may overcome this presumption by demonstrating (using any of the methods authorized in Part VI.E.5.b) that the actual or calculated discharge for that drainage area is in compliance with the applicable interim or final effluent limitation.

iii. Each Permittee shall be held liable for violations of the effluent limitations assigned to their area. If a Permittee's compliance strategy includes *full* or *partial capture devices* and it chooses to install a full or partial capture device in the MS4 physical infrastructure of another public entity, it is responsible for obtaining all necessary permits to do so. If a Permittee believes it is unable to obtain the permits needed to install a full capture or partial capture device within another Permittee's MS4 physical infrastructure, either Permittee may request the Executive Officer to hold a conference with the Permittees. Nothing in this Order shall affect the right of that public entity or a Permittee to seek indemnity or other recourse from the other as they deem appropriate. Nothing in this subsection shall be construed as relieving a Permittee of any liability that the Permittee would otherwise have under this Order.

c. Monitoring and Reporting Requirements (pursuant to California Water Code section 13383)

i. Each Permittee shall submit a TMDL Compliance Report as part of its Annual Report detailing compliance with the applicable interim and/or final effluent limitations. Reporting shall include the information specified below. The report shall be submitted on the reporting form specified by the Regional Water Board Executive Officer. The report shall be signed under penalty of perjury by the Permittee's principal executive officer or ranking elected official or duly authorized representative of the officer, consistent with Part V.B of Attachment D (Standard Provisions), who is responsible for ensuring compliance with this Order. Each Permittee shall be charged with and shall demonstrate compliance with its applicable effluent limitations beginning with its December 15, 2013, TMDL Compliance Report.

(1) Reporting Compliance based on Full Capture Systems: Permittees shall provide information on the number and location of full capture installations, the sizing of each full capture installation, the drainage areas addressed by these installations, and compliance with the applicable interim or final effluent limitation, in its TMDL Compliance Report. The Los Angeles Water Board will periodically audit sizing, performance, and other data to

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validate that a system satisfies the criteria established for a *full capture system* and any conditions established by the Regional Water Board Executive Officer in the certification.

(2) Reporting Compliance based on Partial Capture Systems and/or Institutional Controls:

(a) Using Performance Data Specific to the Permittee’s Area: In its TMDL Compliance Report, a Permittee shall provide: (i) site-specific performance data for the applicable device(s); (ii) information on the number and location of such installations, and the drainage areas addressed by these installations; and (iii) calculated compliance with the applicable effluent limitations.

(b) Using Direct Measurement of Trash Discharge: Permittees shall provide an accounting of DGR and trash removal via street sweeping, catch basin clean outs, etc., in a database to facilitate the calculation of discharge for each rain event. The database shall be maintained and provided to the Regional Water Board for inspection upon request. In its TMDL Compliance Report, a Permittee shall provide information on its annual DGR, calculated storm year discharge, and compliance with the applicable effluent limitation.

(3) Reporting Compliance based on Combined Compliance Approaches:

Permittees shall provide the information specified in Part VI.E.5.c.i(1) for areas where *full capture systems* are installed and that are specified in Part VI.E.5.c.i(2)(a) or (b), as appropriate, for areas where *partial capture devices* and *institutional controls* are applied. In its TMDL Compliance Report, a Permittee shall also provide information on compliance with the applicable effluent limitation based on the combined compliance approaches.

(4) Reporting Compliance based on an MFAC/BMP Approach:

The MFAC/BMP Program includes a Trash Monitoring and Reporting Plan, and a requirement that the responsible Permittees will self-report any non-compliance with its provisions. The results and report of the Trash Monitoring and Reporting Plan must be submitted to Regional Water Board with the Permittee’s Annual Report.

ii. Violation of the reporting requirements of this Part shall be punishable pursuant to, inter alia, California Water Code section 13385, subdivisions (a)(3) and (h)(1), and/or section 13385.1.

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ATTACHMENT A – DEFINITIONS

The following are definitions for terms in this Order:

Adverse Impact

A detrimental effect upon water quality or beneficial uses caused by a discharge or loading of a pollutant or pollutants.

Anti-degradation Policies

Laws, policies and regulations set forth and state and federal statutes and regulations e.g., *Statement of Policy with Respect to Maintaining High Quality Water in California*, State Board Resolution No. 68-16; 40 CFR section 131.12.

Applicable Standards and Limitations

All State, interstate, and federal standards are limitations to which a “discharge” or a related activity is subject under the CWA, including effluent limitations, water quality standards, standards of performance, toxic effluent standards or prohibitions, “best management practices,” and pretreatment standards under sections 301, 302, 303, 304, 306, 307, 308, 403 and 404 of CWA.

Areas of Special Biological Significance (ASBS)

All those areas of this state as ASBS, listed specifically within the California Ocean Plan or so designated by the State Board which, among other areas, includes the area from Mugu Lagoon to Latigo Point: Oceanwater within a line originating from Laguna Point at 34° 5' 40" north, 119° 6'30" west, thence southeasterly following the mean high tideline to a point at Latigo Point defined by the intersection of the mean high tide line and a line extending due south of Benchmark 24; thence due south to a distance of 1000 feet offshore or to the 100 foot isobaths, whichever distance is greater; thence northwesterly following the 100 foot isobaths or maintaining a 1,000-foot distance from shore, whichever maintains the greater distance from shore, to a point lying due south of Laguna Point, thence due north to Laguna Point.

Arithmetic Mean (μ)

Also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

$$\text{Arithmetic mean} = \mu = \Sigma x / n$$

where:

Σx is the sum of the measured ambient water concentrations, and n is the number of samples.

Authorized Discharge

Any discharge that is authorized pursuant to an NPDES permit or meets the conditions set forth in this Order.

Authorized Non-Storm Water DischargeR
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Authorized non-storm water discharges are discharges that are not composed entirely of storm water and that are either: (1) separately regulated by an individual or general NPDES permit and allowed to discharge to the MS4 when in compliance with all NPDES permit conditions; (2) authorized by USEPA⁵⁰ pursuant to sections 104(a) or 104(b) of CERCLA that either (i) will comply with water quality standards as applicable or relevant and appropriate requirements (“ARARs”) under section 121(d)(2) of CERCLA or (ii) are subject to (a) a written waiver of ARARs by USEPA pursuant to section 121(d)(4) of CERCLA or (b) a written determination by USEPA that compliance with ARARs is not practicable considering the exigencies of the situation, pursuant to 40 CFR section 300.415(j); or (3) necessary for emergency responses purposes, including flows from emergency fire fighting activities.

Automotive Service Facilities

A facility that is categorized in any one of the following Standard Industrial Classification (SIC) and North American Industry Classification System (NAICS) codes. For inspection purposes, Permittees need not inspect facilities with SIC codes 5013, 5014, 5541, 5511, provided that these facilities have no outside activities or materials that may be exposed to storm water.

Average Monthly Effluent Limitation (AMEL)

The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Bacteria Total Maximum Daily Load (TMDL) Dry Weather

Defined in the Bacteria TMDLs as those days with less than 0.1 inch of rainfall and those days occurring more than 3 days after a rain.

Bacteria Total Maximum Daily Load (TMDL) Wet Weather

Defined in the Bacteria TMDLs as a day with 0.1 inch or more of rain and 3 days following the rain event.

Baseline Waste Load Allocation

The Waste Load Allocation assigned to a Permittee before reductions are required. The progressive reductions in the Waste Load Allocations are based on a percentage of the Baseline Waste Load Allocation. The Baseline Waste Load Allocation for each jurisdiction was calculated based on the annual average amount of trash discharged to the storm drain system from a representative sampling of land use areas, as determined during the Baseline Monitoring Program. The Baseline Waste Load Allocations are incorporated into the Basin Plan at Table 7-2.2.

Basin Plan

The Water Quality Control Plan, Los Angeles Region, Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, adopted by the Regional Water Board on June 13, 1994 and subsequent amendments.

Beneficial Uses

⁵⁰ These typically include short-term, high volume discharges resulting from the development or redevelopment of groundwater extraction wells, or USEPA or State-required compliance testing of potable water treatment plants, as part of a USEPA authorized groundwater remediation action under CERCLA.

The existing or potential uses of receiving waters in the permit area as designated by the Regional Water Board in the Basin Plan.

Best Management Practices (BMPs)

BMPs are practices or physical devices or systems designed to prevent or reduce pollutant loading from storm water or non-storm water discharges to receiving waters, or designed to reduce the volume of storm water or non-storm water discharged to the receiving water.

Bioaccumulative

Those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

Biofiltration

A LID BMP that reduces storm water pollutant discharges by intercepting rainfall on vegetative canopy, and through incidental infiltration and/or evapotranspiration, and filtration. As described in the *Ventura County Technical Guidance Manual*, studies have demonstrated that biofiltration of 1.5 times the storm water quality design volume (SWQDv) provides approximately equivalent or greater reductions in pollutant loading when compared to bioretention or infiltration of the SWQDv.⁵¹ Incidental infiltration is an important factor in achieving the required pollutant load reduction. Therefore, the term “biofiltration” as used in this Order is defined to include only systems designed to facilitate incidental infiltration or achieve the equivalent pollutant reduction as biofiltration BMPs with an underdrain (subject to Executive Officer approval). Biofiltration BMPs include bioretention systems with an underdrain and bioswales.

Bioretention

A LID BMP that reduces storm water runoff by intercepting rainfall on vegetative canopy, and through evapotranspiration and infiltration. The bioretention system typically includes a minimum 2-foot top layer of a specified soil and compost mixture underlain by a gravel-filled temporary storage pit dug into the *in-situ* soil. As defined in this Order, a bioretention BMP may be designed with an overflow drain, but may not include an underdrain. When a bioretention BMP is designed or constructed with an underdrain it is regulated in this Order as biofiltration.

Bioswale

A LID BMP consisting of a shallow channel lined with grass or other dense, low-growing vegetation. Bioswales are designed to collect storm water runoff and to achieve a uniform sheet flow through the dense vegetation for a period of several minutes.

Carcinogenic

Pollutants are substances that are known to cause cancer in living organisms.

⁵¹ Geosyntec Consultants and Larry Walker Associates. 2011. *Ventura County Technical Guidance Manual for Stormwater Quality and Control Measures, Manual Update 2011. Appendix D*. Prepared for the Ventura Countywide Stormwater Quality Management Program. July 13, 2011. pp. D-6 – D-15.

Coefficient of Variation (CV)

CV is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

Commercial Development

Any development on private land that is not heavy industrial or residential. The category includes, but is not limited to: hospitals, laboratories and other medical facilities, educational institutions, recreational facilities, plant nurseries, car wash facilities; mini-malls and other business complexes, shopping malls, hotels, office buildings, public warehouses and other light industrial complexes.

Commercial Malls

Any development on private land comprised of one or more buildings forming a complex of stores which sells various merchandise, with interconnecting walkways enabling visitors to easily walk from store to store, along with parking area(s). A commercial mall includes, but is not limited to: mini-malls, strip malls, other retail complexes, and enclosed shopping malls or shopping centers.

Conditionally Exempt Essential Non-Storm Water Discharge

Conditionally exempt essential non-storm water discharges are certain categories of discharges that are not composed entirely of storm water and that are allowed by the Regional Water Board to discharge to the MS4, if in compliance with all specified requirements; are not otherwise regulated by an individual or general NPDES permit; and are essential public services that are directly or indirectly required by other State or federal statute and/or regulation. These include non-storm water discharges from ~~potable drinking water supplier distribution system releases water sources~~ and non-emergency fire fighting activities. Conditionally exempt essential non-storm water discharges may contain minimal amounts of pollutants, however, when in compliance with industry standard BMPs and control measures, do not result in significant environmental effects. (See 55 Fed. Reg. 47990, 47995 (Nov. 16, 1990)).

Conditionally Exempt Non-Storm Water Discharge

Conditionally exempt non-storm water discharges are certain categories of discharges that are not composed entirely of storm water and that are either not sources of pollutants or may contain only minimal amounts of pollutants and when in compliance with specified BMPs do not result in significant environmental effects. (See 55 Fed. Reg. 47990, 47995 (Nov. 16, 1990)).

Construction

~~Any development on private land that is not heavy industrial or residential. The category includes, but is not limited to: hospitals, laboratories and other medical facilities, educational institutions, recreational facilities, plant nurseries, car wash facilities, mini-malls and other business complexes, shopping malls, hotels, office buildings, public warehouses and other light industrial complexes.~~ Construction activity includes any construction or demolition activity, clearing, grading, grubbing, or excavation or any other activity that results in land disturbance. Construction does not include emergency construction activities required to immediately protect public health and safety or routine maintenance activities required to maintain the

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integrity of structures by performing minor repair and restoration work, maintain the original line and grade, hydraulic capacity, or original purposes of the facility. See "Routine Maintenance" definition for further explanation. Where clearing, grading or excavating of underlying soil takes place during a repaving operation, State General Construction Permit coverage is required if more than one acre is disturbed or the activities are part of a larger plan.

Control

To minimize, reduce, eliminate, or prohibit by technological, legal, contractual or other means, the discharge of pollutants from an activity or activities.

Daily Discharge

Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

Daily Generation Rate (DGR)

The estimated amount of trash deposited within a representative drainage area during a 24-hour period, derived from the amount of trash collected from streets and catch basins in the area over a 30-day period.

Dechlorinated/Debrominated Swimming Pool Discharge

Swimming pool discharges which have no measurable chlorine or bromine and do not contain any detergents, wastes, or additional chemicals not typically found in swimming pool water. The term does not include swimming pool filter backwash.

Detected, but Not Quantified (DNQ)

DNQ are those sample results less than the RL, but greater than or equal to the laboratory's MDL.

Development

Any construction, rehabilitation, redevelopment or reconstruction of any public or private residential project (whether single-family, multi-unit or planned unit development); industrial, commercial, retail and other non-residential projects, including public agency projects; or mass grading for future construction. It does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of facility, nor does it include emergency construction activities required to immediately protect public health and safety.

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Dilution Credit

~~Dilution Credit is the amount of dilution granted to a discharge in the calculation of a water quality based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.~~

Directly Adjacent

Situated within 200 feet of the contiguous zone required for the continued maintenance, function, and structural stability of the environmentally sensitive area.

Director

The Director of a municipality and Person(s) designated by and under the Director's instruction and supervision.

Discharge

When used without qualification the "discharge of a pollutant."

Discharging Directly

Outflow from a drainage conveyance system that is composed entirely or predominantly of flows from the subject, property, development, subdivision, or industrial facility, and not commingled with the flows from adjacent lands.

Discharge of a Pollutant

Any addition of any "pollutant" or combination of pollutants to "waters of the United States" from any "point source" or, any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation. The term discharge includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works.

Disturbed Area

An area that is altered as a result of clearing, grading, and/or excavation.

Drinking Water Supplier Distribution Systems Releases

Sources of flows from drinking water supplier storage, supply and distribution systems including flows from system failures, pressure releases, system maintenance, distribution line testing, fire hydrant flow testing; and flushing and dewatering of pipes, reservoirs, vaults, and minor non-invasive well maintenance activities not involving chemical addition(s). It does not include wastewater discharges from activities that occur at wellheads, such as well construction, well development (i.e., aquifer pumping tests, well purging, etc.), or major well maintenance. For the purposes of this Order, drinking water supplier distribution system releases include treated and raw water (from raw water pipelines, reservoirs, storage tanks, etc.) that are dedicated for drinking water supply.

Effective Impervious Area (EIA)

EIA is the portion of the surface area that is hydrologically connected to a drainage system via a hardened conveyance or impervious surface without any intervening median to mitigate the flow volume.

Effluent Concentration Allowance (ECA)

ECA is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

Effluent Limitation

Any restriction imposed on quantities, discharge rates, and concentrations of pollutants, which are discharged from point sources to waters of the U.S. (40 CFR § 122.2).

Enclosed Bays

Enclosed Bays means indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

Environmentally Sensitive Areas (ESAs)

An area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which would be easily disturbed or degraded by human activities and developments (California Public Resources Code § 30107.5). Areas subject to storm water mitigation requirements are: areas designated as Significant Ecological Areas by the County of Los Angeles (Los Angeles County Significant Areas Study, Los Angeles County Department of Regional Planning (1976) and amendments); an area designated as a Significant Natural Area by the California Department of Fish and Game's Significant Natural Areas Program, provided that area has been field verified by the Department of Fish and Game; an area listed in the Basin Plan as supporting the "Rare, Threatened, or Endangered Species (RARE)" beneficial use; and an area identified by a Permittee as environmentally sensitive.

Estimated Chemical Concentration

The estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

Estuaries

Estuaries means waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point

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upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in California Water Code section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

Existing Discharger

Any discharger that is not a new discharger. An existing discharger includes an “increasing discharger” (i.e., any existing facility with treatment systems in place for its current discharge that is or will be expanding, upgrading, or modifying its permitted discharge after the effective date of this Order).

Flow-through treatment BMPs

Flow-through treatment BMPs include modular, vault type “high flow biotreatment” devices contained within an impervious vault with an underdrain or designed with an impervious liner and an underdrain.

Full Capture System

Any single device or series of devices, certified by the Executive Officer, that traps all particles retained by a 5 mm mesh screen and has a design treatment capacity of not less than the peak flow rate Q resulting from a one-year, one-hour storm in the sub-drainage area. The Rational Equation is used to compute the peak flow rate:

$$Q = C \times I \times A,$$

Where:

Q = design flow rate (cubic feet per second, cfs);

C = runoff coefficient (dimensionless);

I = design rainfall intensity (inches per hour, as determined per the Los Angeles County rainfall isohyetal maps relevant to the Los Angeles River watershed), and

A = sub-drainage area (acres).

General Construction Activities Storm Water Permit (GCASP)

The general NPDES permit adopted by the State Board which authorizes the discharge of storm water from construction activities under certain conditions.

General Industrial Activities Storm Water Permit (GIASP)

The general NPDES permit adopted by the State Board which authorizes the discharge of storm water from certain industrial activities under certain conditions.

Green Roof

A LID BMP using planter boxes and vegetation to intercept rainfall on the roof surface. Rainfall is intercepted by vegetation leaves and through evapotranspiration. Green roofs may be designed as either a bioretention BMP or as a biofiltration BMP. To receive credit as a bioretention BMP, the green roof system planting medium shall be of sufficient depth to provide capacity within the pore space volume to contain the design storm depth and may not be designed or constructed with an underdrain.

Hillside

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Property located in an area with known erosive soil conditions, where the development contemplates grading on any natural slope that is 25% or greater and where grading contemplates cut or fill slopes.

Hydrologic Unit Code (HUC)

A standardized watershed classification system in which each hydrologic unit is identified by a unique hydrologic unit code (HUC). The HUC may consist of an eight (8) to twelve (12) digit number. The 8-digit HUC identifies an area based on four levels of classification: region, sub-region, hydrologic basin, and hydrologic sub-basin. The Watershed Boundary Dataset includes the 12-digit HUC delineation, which further divides each hydrologic unit into watersheds and sub-watersheds based on scientific information and not administrative boundaries. The Watershed Boundary Dataset is the highest resolution and the most detailed delineation of the watershed boundaries. The mapping precision has been improved to a scale of 1:24,000.

Illicit Connection

Any man-made conveyance that is connected to the storm drain system without a permit, excluding roof drains and other similar type connections. Examples include channels, pipelines, conduits, inlets, or outlets that are connected directly to the storm drain system.

Illicit Discharge

Any discharge into the MS4 or from the MS4 into a receiving water that is prohibited under local, state, or federal statutes, ordinances, codes, or regulations. The term illicit discharge includes any non-storm water discharge, except authorized non-storm water discharges; conditionally exempt non-storm water discharges; and non-storm water discharges resulting from natural flows specifically identified in Part III.A.1.d.

Illicit Disposal

Any disposal, either intentionally or unintentionally, of material(s) or waste(s) that can pollute storm water.

Improved drainage system

An improved drainage system is a drainage system that has been channelized or armored. The clearing or dredging of a natural drainage system does not cause the system to be classified as an improved drainage system.

Industrial/Commercial Facility

Any facility involved and/or used in the production, manufacture, storage, transportation, distribution, exchange or sale of goods and/or commodities, and any facility involved and/or used in providing professional and non-professional services. This category of facilities includes, but is not limited to, any facility defined by either the Standard Industrial Classifications (SIC) or the North American Industry Classification System (NAICS). Facility ownership (federal, state, municipal, private) and profit motive of the facility are not factors in this definition.

Industrial Activities Storm Water General Permit (IASGP)

The general NPDES permit adopted by the State Water Board, which authorizes the discharge of storm water from certain industrial activities under certain conditions.

Industrial Park

A land development that is set aside for industrial development. Industrial parks are usually located close to transport facilities, especially where more than one transport modalities coincide: highways, railroads, airports, and navigable rivers. It includes office parks, which have offices and light industry.

Infiltration BMP

A LID BMP that reduces storm water runoff by capturing and infiltrating the runoff into in-situ soils or amended on-site soils. Examples of infiltration BMPs include infiltration basins, dry wells, and pervious pavement.⁵²

Inland Surface Waters

All surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

Inspection

Entry and the conduct of an on-site review of a facility and its operations, at reasonable times, to determine compliance with specific municipal or other legal requirements. The steps involved in performing an inspection, include, but are not limited to:

1. Pre-inspection documentation research.;
2. Request for entry;
3. Interview of facility personnel;
4. Facility walk-through.
5. Visual observation of the condition of facility premises;
6. Examination and copying of records as required;
7. Sample collection (if necessary or required);
8. Exit conference (to discuss preliminary evaluation); and,
9. Report preparation, and if appropriate, recommendations for coming into compliance.

In the case of restaurants, a Permittee may conduct an inspection from the curbside, provided that such "curbside" inspection provides the Permittee with adequate information to determine an operator's compliance with BMPs that must be implemented per requirements of this Order, Regional Water Board Resolution No. 98-08, County and municipal ordinances, and the SQMP.

Instantaneous Maximum Effluent Limitation

The highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation

⁵² Some types of infiltration BMPs such as dry wells, may meet the definition of a Class V, deep well injection facility and may be subject to permitting under U.S. EPA requirements.

The lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

Institutional Controls

Programmatic trash control measures that do not require construction or structural modifications to the MS4. Examples include street sweeping, public education, and clean out of catch basins that discharge to storm drains.

Integrated Pest Management (IPM) is an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties.

Large Municipal Separate Storm Sewer System (MS4)

All MS4s that serve a population greater than 250,000 (1990 Census) as defined in 40 CFR 122.26 (b)(4). The Regional [Water](#) Board designated Los Angeles County as a large MS4 in 1990, based on: (i) the U.S. Census Bureau 1990 population count of 8.9 million, and (ii) the interconnectivity of the MS4s in the incorporated and unincorporated areas within the County.

Local SWPPP

The Storm Water Pollution Prevention Plan required by the local agency for a project that disturbs one or more acres of land.

Low Impact Development (LID)

LID consists of building and landscape features designed to retain or filter storm water runoff.

Major Outfall

Major municipal separate storm sewer outfall (or “major outfall”) means a municipal separate storm sewer outfall that discharges from a single pipe with an inside diameter of 36 inches or more or its equivalent (discharge from a single conveyance other than circular pipe which is associated with a drainage area of more than 50 acres); or for municipal separate storm sewers that receive storm water from lands zoned for industrial activity (based on comprehensive zoning plans or the equivalent), an outfall that discharges from a single pipe with an inside diameter of 12 inches or more or from its equivalent (discharge from other than a circular pipe associated with a drainage area of 2 acres or more). (40 CFR § 122.26(b)(5))

Maximum Daily Effluent Limitation (MDEL)

The highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Maximum Extent Practicable (MEP)

In selecting BMPs which will achieve MEP, it is important to remember that municipalities will be responsible to reduce the discharge of pollutants in storm water to the maximum extent practicable. This means choosing effective BMPs, and rejecting applicable BMPs only where

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other effective BMPs will serve the same purpose, the BMPs would not be technically feasible, or the cost would be prohibitive. The following factors may be useful to consider:

1. Effectiveness: Will the BMP address a pollutant of concern?
2. Regulatory Compliance: Is the EMP in compliance with storm water regulations as well as other environmental regulations?
3. Public acceptance: Does the BMP have public support?
4. Cost: Will the cost of implementing the BMP have a reasonable relationship to the pollution control benefits to be achieved?
5. Technical Feasibility: Is the BMP technically feasible considering soils, geography, water resources, etc.?

After selecting a menu of BMPs, it is of course the responsibility of the discharger to insure that all BMPs are implemented.

Median

The middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, then the median = $X_{(n+1)/2}$. If n is even, then the median = $(X_{n/2} + X_{(n/2)+1})/2$ (i.e., the midpoint between the $n/2$ and $n/2+1$).

Method Detection Limit (MDL)

MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in 40 CFR Part 136, Attachment B (revised as of July 3, 1999).

Minimum Level (ML)

ML is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Mixing Zone

~~Mixing Zone is a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.~~

Municipal Separate Storm Sewer System (MS4)

A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

- (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved

management agency under section 208 of the CWA that discharges to waters of the United States;

(ii) Designed or used for collecting or conveying storm water;

(iii) Which is not a combined sewer; and

(iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR § 122.2.

(40 CFR § 122.26(b)(8))

National Pollutant Discharge Elimination System (NPDES)

The national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under CWA §307, 402, 318, and 405. The term includes an “approved program.”

Natural Drainage System

A natural drainage system is a drainage system that has not been improved (e.g., channelized or armored). The clearing or dredging of a natural drainage system does not cause the system to be classified as an improved drainage system.

New Development

Land disturbing activities; structural development, including construction or installation of a building or structure, creation of impervious surfaces; and land subdivision.

Non-Storm Water Discharge

Any discharge into the MS4 or from the MS4 into a receiving water that is not composed entirely of storm water.

Not Detected (ND)

Sample results which are less than the laboratory’s MDL.

Nuisance

Anything that meets all of the following requirements: (1) is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property; (2) affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.; (3) occurs during, or as a result of, the treatment or disposal of wastes.

Ocean Waters

The territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. Discharges to ocean waters are regulated in accordance with the State Water Board’s California Ocean Plan.

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A point source as defined by 40 CFR 122.2 at the point where a municipal separate storm sewer discharges to waters of the United States and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances with connect segments of the same stream or other waters of the United States and are used to convey waters of the United States. (40 CFR § 122.26(b)(9))

Parking Lot

Land area or facility for the parking or storage of motor vehicles used for businesses, commerce, industry, or personal use, with a lot size of 5,000 square feet or more of surface area, or with 25 or more parking spaces.

Partial Capture Device

Any structural trash control device that has not been certified by the Executive Officer as meeting the “full capture” performance requirements.

Permittee(s)

Co-Permittees and any agency named in this Order as being responsible for permit conditions within its jurisdiction. Permittees to this Order include the Los Angeles County Flood Control District, Los Angeles County, and the cities of Agoura Hills, Alhambra, Arcadia, Artesia, Azusa, Baldwin Park, Bellflower, Bell Gardens, Beverly Hills, Bradbury, Burbank, Calabasas, Carson, Cerritos, Claremont, Commerce, Compton, Covina, Cudahy, Culver City, Diamond Bar, Downey, Duarte, El Monte, El Segundo, Gardena, Glendale, Glendora, Hawaiian Gardens, Hawthorne, Hermosa Beach, Hidden Hills, Huntington Park, Industry, Inglewood, Irwindale, La Canada Flintridge, La Habra Heights, Lakewood, La Mirada, La Puente, La Verne, Lawndale, Lomita, Los Angeles, Lynwood, Malibu, Manhattan Beach, Maywood, Monrovia, Montebello, Monterey Park, Norwalk, Palos Verdes Estates, Paramount, Pasadena, Pico Rivera, Pomona, Rancho Palos Verdes, Redondo Beach, Rolling Hills, Rolling Hills Estates, Rosemead, San Dimas, San Fernando, San Gabriel, San Marino, Santa Clarita, Santa Fe Springs, Santa Monica, Sierra Madre, Signal Hill, South El Monte, South Gate, South Pasadena, Temple City, Torrance, Vernon, Walnut, West Covina, West Hollywood, Westlake Village, and Whittier.

Persistent Pollutants

Persistent pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

Planning Priority Projects

Those projects that are required to incorporate appropriate storm water mitigation measures into the design plan for their respective project. These types of projects include:

1. Ten or more unit homes (includes single family homes, multifamily homes, condominiums, and apartments)
2. A 100,000 or more square feet of impervious surface area industrial/ commercial development (1 ac starting March 2003)
3. Automotive service facilities (SIC 5013, 5014, 5541, 7532-7534, and 7536-7539)
4. Retail gasoline outlets
5. Restaurants (SIC 5812)
6. Parking lots 5,000 square feet or more of surface area or with 25 or more parking spaces

7. Redevelopment projects in subject categories that meet Redevelopment thresholds
8. Projects located in or directly adjacent to or discharging directly to an ESA, which meet thresholds; and
9. Those projects that require the implementation of a site-specific plan to mitigate post-development storm water for new development not requiring a SUSMP but which may potentially have adverse impacts on post-development storm water quality, where the following project characteristics exist:
 - a) Vehicle or equipment fueling areas;
 - b) Vehicle or equipment maintenance areas, including washing and repair;
 - c) Commercial or industrial waste handling or storage;
 - d) Outdoor handling or storage of hazardous materials;
 - e) Outdoor manufacturing areas;
 - f) Outdoor food handling or processing;
 - g) Outdoor animal care, confinement, or slaughter; or
 - h) Outdoor horticulture activities.

Point Source

Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff. (40 CFR § 122.2)

Pollutant Minimization Program (PMP)

PMP means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to California Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

Pollutants

Those "pollutants" defined in CWA §502(6) (33.U.S.C.§1362(6)), and incorporated by reference into California Water Code §13373

Pollution Prevention

Pollution Prevention means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in California Water Code Section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental

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medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State or Regional Water Board.

Potable Water

Water that meets the drinking water standards of the US Environmental Protection Agency.

~~Potable Water Distribution Systems Releases~~

~~Sources of flows from drinking water storage, supply and distribution systems including flows from system failures, pressure releases, system maintenance, distribution line testing, fire hydrant flow testing, and flushing and dewatering of pipes, reservoirs, vaults, and minor non-invasive well maintenance activities not involving chemical addition(s). It does not include wastewater discharges from activities that occur at wellheads, such as well construction, well development (i.e., aquifer pumping tests, well purging, etc.), or major well maintenance.~~

Project

All development, redevelopment, and land disturbing activities. The term is not limited to "Project" as defined under CEQA (Pub. Resources Code §21065).

Rain Event

Any rain event greater than 0.1 inch in 24 hours except where specifically stated otherwise

Rainfall Harvest and Use

Rainfall harvest and use is an LID BMP system designed to capture runoff, typically from a roof but can also include runoff capture from elsewhere within the site, and to provide for temporary storage until the harvested water can be used for irrigation or non-potable uses. The harvested water may also be used for potable water uses if the system includes disinfection treatment and is approved for such use by the local building department.

Rare, Threatened, or Endangered Species (RARE)

A beneficial use for waterbodies in the Los Angeles Region, as designated in the Basin Plan (Table 2-1), that supports habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened, or endangered

Raw Water

Water that is taken from the environment by drinking water suppliers with the intent to subsequently treat or purify it to produce potable water. Raw water does not include wastewater discharges from activities that occur at wellheads, such as well construction, well development (i.e., aquifer pumping tests, well purging, etc.), or major well maintenance.

Receiving Water

A "water of the United States" into which waste and/or pollutants are or may be discharged.

Receiving Water Limitation

Any applicable numeric or narrative water quality objective or criterion, or limitation to implement the applicable water quality objective or criterion, for the receiving water as contained in Chapter 3 or 7 of the Water Quality Control Plan for the Los Angeles Region

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(Basin Plan), water quality control plans or policies adopted by the State Water Board, or federal regulations, including but not limited to, 40 CFR § 131.38.

Redevelopment

Land-disturbing activity that results in the creation, addition, or replacement of 5,000 square feet or more of impervious surface area on an already developed site. Redevelopment includes, but is not limited to: the expansion of a building footprint; addition or replacement of a structure; replacement of impervious surface area that is not part of a routine maintenance activity; and land disturbing activities related to structural or impervious surfaces. It does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of facility, nor does it include emergency construction activities required to immediately protect public health and safety.

Regional Administrator

The Regional Administrator of the Regional Office of the USEPA or the authorized representative of the Regional Administrator.

Reporting Level (RL)

RL is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from Appendix 4 of the [State Implementation Policy \(SIP\)](#) in accordance with Section 2.4.2 of the SIP or established in accordance with Section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Residual Water

In the context of this Order, water remaining in a structural BMP subsequent to the drawdown or drainage period. The residual water typically contains high concentration(s) of pollutants.

Restaurant

A facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC Code 5812).

Retail Gasoline Outlet

Any facility engaged in selling gasoline and lubricating oils.

Routine Maintenance

Routine maintenance projects include, but are not limited to projects conducted to:

1. Maintain the original line and grade, hydraulic capacity, or original purpose of the facility.

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- 2. Perform as needed restoration work to preserve the original design grade, integrity and hydraulic capacity of flood control facilities.
 - 3. Includes road shoulder work, regrading dirt or gravel roadways and shoulders and performing ditch cleanouts.
 - 4. Update existing lines* and facilities to comply with applicable codes, standards, and regulations regardless if such projects result in increased capacity.
 - 5. Repair leaks
- Routine maintenance does not include construction of new** lines or facilities resulting from compliance with applicable codes, standards and regulations.
- * Update existing lines includes replacing existing lines with new materials or pipes.
- ** New lines are those that are not associated with existing facilities and are not part of a project to update or replace existing lines.

Runoff

Any runoff including storm water and dry weather flows from a drainage area that reaches a receiving water body or subsurface. During dry weather it is typically comprised of base flow either contaminated with pollutants or uncontaminated, and nuisance flows.

Satellite Collection System

~~The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.~~

Screening

Using proactive methods to identify illicit connections through a continuously narrowing process. The methods may include: performing baseline monitoring of open channels, conducting special investigations using a prioritization approach, analyzing maintenance records for catch basin and storm drain cleaning and operation, and verifying all permitted connections into the storm drains. Special investigation techniques may include: dye testing, visual inspection, smoke testing, flow monitoring, infrared, aerial and thermal photography, and remote control camera operation.

Sidewalk Rinsing

Means pressure washing of paved pedestrian walkways with average water usage of 0.006 gallons per square foot, with no cleaning agents, and properly disposing of all debris collected, as authorized under Regional Water Board Resolution No. 98-08.

Significant Ecological Areas (SEAs)

An area that is determined to possess an example of biotic resources that cumulatively represent biological diversity, for the purposes of protecting biotic diversity, as part of the Los Angeles County General Plan.

Areas are designated as SEAs, if they possess one or more of the following criteria:

- 1. The habitat of rare, endangered, and threatened plant and animal species.
- 2. Biotic communities, vegetative associations, and habitat of plant and animal species that are either one of a kind, or are restricted in distribution on a regional basis.

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3. Biotic communities, vegetative associations, and habitat of plant and animal species that are either one of a kind or are restricted in distribution in Los Angeles County.
4. Habitat that at some point in the life cycle of a species or group of species, serves as a concentrated breeding, feeding, resting, migrating grounds and is limited in availability either regionally or within Los Angeles County.
5. Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent an unusual variation in a population or community.
6. Areas important as game species habitat or as fisheries.
7. Areas that would provide for the preservation of relatively undisturbed examples of natural biotic communities in Los Angeles County.
8. Special areas.

Significant Natural Area (SNA)

An area defined by the California Department of Fish and Game (DFG), Significant Natural Areas Program, as an area that contains an important example of California's biological diversity. The most current SNA maps, reports, and descriptions can be downloaded from the DFG website at <ftp://maphost.dfg.ca.gov/outgoing/whdab/sna/>. These areas are identified using the following biological criteria only, irrespective of any administrative or jurisdictional considerations:

1. Areas supporting extremely rare species or habitats.
2. Areas supporting associations or concentrations of rare species or habitats.
3. Areas exhibiting the best examples of rare species and habitats in the state

Site

The land or water area where any “facility or activity” is physically located or conducted, including adjacent land used in connection with the facility or activity.

Source Control BMP

Any schedules of activities, prohibitions of practices, maintenance procedures, managerial practices or operational practices that aim to prevent storm water pollution by reducing the potential for contamination at the source of pollution.

Source of Drinking Water

Any water designated as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan.

SQMP

The Los Angeles Countywide Stormwater Quality Management Program.

Standard Deviation (σ)

Standard Deviation is a measure of variability that is calculated as follows:

$$\sigma = (\sum[(x - \mu)^2]/(n - 1))^{0.5}$$

where:

x is the observed value;

μ is the arithmetic mean of the observed values; and

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n is the number of samples.

State Storm Water Pollution Prevention Plan (State SWPPP)

A plan, as required by a State General Permit, identifying potential pollutant sources and describing the design, placement and implementation of BMPs, to effectively prevent non-stormwater Discharges and reduce Pollutants in Stormwater Discharges during activities covered by the General Permit.

Storm Water

Storm water runoff, snow melt runoff, and surface runoff and drainage related to precipitation events (pursuant to 40 CFR § 122.26(b)(13); 55 Fed. Reg. 47990, 47995 (Nov. 16, 1990)).

Storm Water Discharge Associated with Industrial Activity

Industrial discharge as defined in 40 CFR 122.26(b)(14).

Stormwater Quality Management Program

The Los Angeles Countywide Stormwater Quality Management Program, which includes descriptions of programs, collectively developed by the Permittees in accordance with provisions of the NPDES Permit, to comply with applicable federal and state law, as the same is amended from time to time.

Structural BMP

Any structural facility designed and constructed to mitigate the adverse impacts of storm water and urban runoff pollution (e.g. canopy, structural enclosure). The category may include both Treatment Control BMPs and Source Control BMPs.

SUSMP

The Los Angeles Countywide Standard Urban Stormwater Mitigation Plan. The SUSMP shall address conditions and requirements of new development.

Total Maximum Daily Load (TMDL)

The sum of the individual waste load allocations for point sources and load allocations for nonpoint sources and natural background.

Toxicity Identification Evaluation (TIE)

A set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.

Toxicity Reduction Evaluation (TRE)

TRE is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These

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procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

Trash Excluders

Any structural trash control device that prevents the discharge of trash to the storm drain system or to receiving waters. A trash exclude may or may not be certified by the Executive Officer as meeting the “full capture” performance requirements.

Treatment

The application of engineered systems that use physical, chemical, or biological processes to remove pollutants. Such processes include, but are not limited to, filtration, gravity settling, media absorption, biodegradation, biological uptake, chemical oxidation and UV radiation.

Treatment Control BMP

Any engineered system designed to remove pollutants by simple gravity settling of particulate pollutants, filtration, biological uptake, media absorption or any other physical, biological, or chemical process.

Unconfined ground water infiltration

Water other than waste water that enters the MS4 (including foundation drains) from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow. (See 40 CFR § 35.2005(20).)

Uncontaminated Ground Water Infiltration

Water other than waste water that enters the MS4 (including foundation drains) from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow. (See 40 CFR § 35.2005(20).)

USEPA Phase I Facilities

Facilities in specified industrial categories that are required to obtain an NPDES permit for storm water discharges, as required by 40 CFR 122.26(c). These categories include:

- i. facilities subject to storm water effluent limitation guidelines, new source performance standards, or toxic pollutant effluent standards (40 CFR N)
- ii. manufacturing facilities
- iii. oil and gas/mining facilities
- iv. hazardous waste treatment, storage, or disposal facilities
- v. landfills, land application sites, and open dumps
- vi. recycling facilities
- vii. steam electric power generating facilities
- viii. transportation facilities
- ix. sewage of wastewater treatment works
- x. light manufacturing facilities

Vehicle Maintenance/Material Storage Facilities/Corporation Yards

Any Permittee owned or operated facility or portion thereof that:

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- i. Conducts industrial activity, operates equipment, handles materials, and provides services similar to Federal Phase I facilities;
- ii. Performs fleet vehicle service/maintenance on ten or more vehicles per day including repair, maintenance, washing, and fueling;
- iii. Performs maintenance and/or repair of heavy industrial machinery/equipment; and
- iv. Stores chemicals, raw materials, or waste materials in quantities that require a hazardous materials business plan or a Spill Prevention, Control, and Countermeasures (SPCC) plan.

Water Quality-based Effluent Limitation

Any restriction imposed on quantities, discharge rates, and concentrations of pollutants, which are discharged from point sources to waters of the U.S. necessary to achieve a water quality standard.

Waters of the State

Any surface water or groundwater, including saline waters, within the boundaries of the state.

Waters of the United States or Waters of the U.S.

- a. All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- b. All interstate waters, including interstate “wetlands”;
- c. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, “wetlands,” sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
 - 1. Which are or could be used by interstate or foreign travelers for recreational or other purposes;
 - 2. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - 3. Which are used or could be used for industrial purposes by industries in interstate commerce;
- d. All impoundments of waters otherwise defined as waters of the United States under this definition;
- e. Tributaries of waters identified in paragraphs (a) through (d) of this definition;
- f. The territorial sea; and

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- g. "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraph (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR section 423.22(m), which also meet the criteria of this definition) are not waters of the United States. This exclusion applies only to man-made bodies of water, which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with USEPA.

Wet Season

The calendar period beginning October 1 through April 15.

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ACRONYMS AND ABBREVIATIONS

AMEL	Average Monthly Effluent Limitation
ASBS	Areas of Special Biological Significance
B	Background Concentration
BAT	Best Available Technology Economically Achievable
Basin Plan	<i>Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties</i>
BCT	Best Conventional Pollutant Control Technology
BMP	Best Management Practices
BMPP	Best Management Practices Plan
BPJ	Best Professional Judgment
BOD	Biochemical Oxygen Demand 5-day @ 20 °C
BPT	Best Practicable Treatment Control Technology
C	Water Quality Objective
CCR	California Code of Regulations
CEEIN	California Environmental Education Interagency Network
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CTR	California Toxics Rule
CV	Coefficient of Variation
CWA	Clean Water Act
CWC	California Water Code
Discharger	Los Angeles County MS4 Permittees
DMR	Discharge Monitoring Report
DNQ	Detected But Not Quantified
ELAP	California Department of Public Health Environmental Laboratory Accreditation Program
ELG	Effluent Limitations, Guidelines and Standards
Ep	Erosion potential
ESCP	Erosion and Sediment Control Plan
EWMP	<u>Enhanced Watershed Management Program</u>
Facility	Los Angeles County MS4s
GIS	Geographical Information System
gpd	gallons per day
HUC	<u>Hydrologic Unit Code</u>
IC	Inhibition Coefficient
IC ₁₅	Concentration at which the organism is 15% inhibited
IC ₂₅	Concentration at which the organism is 25% inhibited
IC ₄₀	Concentration at which the organism is 40% inhibited
IC ₅₀	Concentration at which the organism is 50% inhibited
IC/ID	Illicit Connection and Illicit Discharge Elimination
IPM	Integrated Pest Management
LA	Load Allocations
LID	Low Impact Development
LOEC	Lowest Observed Effect Concentration
LUPs	Linear Underground/Overhead Projects

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µg/L	micrograms per Liter
MCM	Minimum Control Measure
mg/L	milligrams per Liter
MDEL	Maximum Daily Effluent Limitation
MEC	Maximum Effluent Concentration
MGD	Million Gallons Per Day
ML	Minimum Level
MRP	Monitoring and Reporting Program
MS4	Municipal Separate Storm Sewer System
NAICS	North American Industry Classification System
ND	Not Detected
NOEC	No Observable Effect Concentration
NPDES	National Pollutant Discharge Elimination System
NSPS	New Source Performance Standards
NTR	National Toxics Rule
OAL	Office of Administrative Law
PIPP	Public Information and Participation Program
PMP	Pollutant Minimization Plan
POTW	Publicly Owned Treatment Works
QA	Quality Assurance
QA/QC	Quality Assurance/Quality Control
QSD	Qualified SWPPP Developer
QSP	Qualified SWPPP Practitioner
Ocean Plan	<i>Water Quality Control Plan for Ocean Waters of California</i>
RAP	Reasonable Assurance Program
REAP	Rain Event Action Plan
Regional Water Board	California Regional Water Quality Control Board, Los Angeles Region
RGOs	Retail Gasoline Outlets
RPA	Reasonable Potential Analysis
SCP	Spill Contingency Plan
SEA	Significant Ecological Area
SIC	Standard Industrial Classification
SIP	State Implementation Policy (<i>Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California</i>)
SMR	Self Monitoring Reports
State Water Board	California State Water Resources Control Board
SWPPP	Storm Water Pollution Prevention Plan
SWQDv	Storm Water Quality Design Volume
SWQPA	State Water Quality Protected Area
TAC	Test Acceptability Criteria
Thermal Plan	<i>Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California</i>
TIE	Toxicity Identification Evaluation
TMDL	Total Maximum Daily Load

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TOC	Total Organic Carbon
TRE	Toxicity Reduction Evaluation
TSD	Technical Support Document
TSS	Total Suspended Solid
TU _c	Chronic Toxicity Unit
USEPA	United States Environmental Protection Agency
WDR	Waste Discharge Requirements
WDID	Waste Discharge Identification
WET	Whole Effluent Toxicity
WLA	Waste Load Allocations
WMA	Watershed Management Area
<u>WMP</u>	<u>Watershed Management Program</u>
WQBELs	Water Quality-Based Effluent Limitations
WQS	Water Quality Standards
%	Percent

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

LOS ANGELES REGION

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576 - 6600 • Fax (213) 576 - 6640
<http://www.waterboards.ca.gov/losangeles>

MONITORING AND REPORTING PROGRAM - No. TBD

FOR

**ORDER R4-2012-XXXX
NPDES PERMIT NO. CAS004001**

**WASTE DISCHARGE REQUIREMENTS
FOR MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) DISCHARGES
WITHIN THE COASTAL WATERSHEDS OF LOS ANGELES COUNTY, EXCEPT
THOSE DISCHARGES ORIGINATING FROM THE CITY OF LONG BEACH MS4**

Month Date, 2012

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I. MONITORING AND REPORTING PROGRAM (MRP)

Section 308(a) of the federal Clean Water Act and sections 122.41(h), (j)-(l), 122.44(i), and 122.48 of Title 40 of the Code of Federal Regulations require that all National Pollutant Discharge Elimination System (NPDES) permits specify monitoring and reporting requirements. Federal regulations applicable to large and medium MS4s also specify additional monitoring and reporting requirements. (40 C.F.R. §§ 122.26(d)(2)(i)(F) & (d)(2)(iii)(D), 122.42(c).) California Water Code section 13383 further authorizes the California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board) to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. This MRP establishes monitoring, reporting, and recordkeeping requirements that implement the federal and California laws and/or regulations.

II. PURPOSE AND SCOPE**A. Primary Objectives**

The primary objectives of the Monitoring Program are to:

1. Assess the chemical, physical, and biological impacts of discharges from the municipal storm water sewer system (MS4) on receiving waters.
2. Assess compliance with receiving water limitations and water quality-based effluent limitations (WQBELs) established to implement Total Maximum Daily Load (TMDL) wet weather and dry weather wasteload allocations (WLAs).
3. Characterize pollutant loads in MS4 discharges.
4. Identify sources of pollutants in MS4 discharges.
5. Measure and improve the effectiveness of pollutant controls implemented under this Order.

B. Purpose

The results of the monitoring requirements outlined below shall be used to refine control measures for the reduction of pollutant loading and the protection and enhancement of the beneficial uses of the receiving waters in Los Angeles County.

C. Provision for Integrated Approach

The Monitoring Program provides flexibility to allow Permittees to develop an integrated monitoring program to address all of the monitoring requirements of this Order and other monitoring obligations or requirements in a cost efficient and effective manner.

D. Provision for a Coordinated Integrated Approach

The Monitoring Program provides flexibility to allow Permittees to coordinate monitoring efforts on a watershed or subwatershed basis to leverage monitoring resources in an effort to increase cost-efficiency and effectiveness and to closely

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align monitoring with TMDL monitoring requirements and Watershed Management Programs.

E. Monitoring Program Elements

The Monitoring Program shall include the following elements:

1. **Receiving water monitoring** shall be performed at previously designated mass emission stations, ~~and/or at~~ TMDL receiving water compliance points, as designated in Regional Water Board Executive Officer approved TMDL Monitoring Plans (see Table E-1 for a list of approved TMDL Monitoring Plans), and additional receiving water locations representative of the impacts from MS4 discharges. The objectives of the receiving water monitoring include the following:
 - a. Determine whether the receiving water limitations are being achieved,
 - b. Assess trends in pollutant concentrations over time, or during specified conditions,
 - c. Determine whether the designated beneficial uses are fully supported as determined by water chemistry, as well as aquatic toxicity and bioassessment monitoring.
2. **Storm water outfall based monitoring;** including TMDL monitoring requirements specified in approved TMDL Monitoring Plans (see Table E-1). Outfall monitoring locations shall be representative of the land uses within the Permittee's jurisdiction. The objectives of the storm water outfall based monitoring program include the following:
 - a. Determine the quality of a Permittee's discharge relative to municipal action levels, as described in Attachment G of this Order,
 - b. Determine whether a Permittee's discharge is in compliance with applicable storm water WQBELs derived from TMDL WLAs,
 - c. Determine whether a Permittee's discharge causes or contributes to an exceedance of receiving water limitations.
3. **Non-storm water outfall based monitoring;** including TMDL monitoring requirements specified in approved TMDL Monitoring Plans (see Table E-1). Outfalls with significant non-storm water discharges that remain unaddressed after source identification shall be monitored. The objectives of the non-storm water outfall based monitoring program include the following:
 - a. Determine whether a Permittee's discharge is in compliance with applicable non-storm water WQBELs derived from TMDL WLAs,
 - b. Determine whether a Permittee's discharge exceeds non-storm water action levels, as described in Attachment G of this Order,
 - c. Determine whether a Permittee's discharge contributes to or causes an exceedance of receiving water limitations,

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- d. Assist a Permittee in identifying illicit discharges as described in Part VI.D.10 of this Order.
- 4. **New Development/Re-development effectiveness tracking.** The objectives of best management practices (BMP) effectiveness tracking is to track whether the conditions in the building permit issued by the Permittee are implemented to ensure the volume of storm water associated with the design storm is retained on-site as required by Part VI.D.7.c.i. of this Order.
- 5. **Regional studies** are required to further characterize the impact of the MS4 discharges on the beneficial uses of the receiving waters. Regional studies shall include the Southern California Stormwater Monitoring Coalition (SMC) Regional Watershed Monitoring Program (bioassessment) and special studies as specified in approved TMDLs (see Section XIX TMDL Reporting, below).

III. GENERAL MONITORING AND REPORTING REQUIREMENTS

- A. Monitoring shall be conducted in accordance with the requirements specified in Attachment D to this Order (Part III, Standard Provisions - Monitoring).
- B. Records of monitoring information shall include information required under Attachment D to this Order (Part IV, Standard Provisions - Records).
- C. All applications, reports, plans, or other information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Attachment D to this Order (Part V.B, Standard Provisions - Reporting, Signatory and Certification Requirements).
- D. Monitoring results shall be reported in accordance with the requirements specified in Attachment D to this Order (Part V.C, Standard Provisions - Reporting, Monitoring Reports).
- E. All monitoring and reporting shall be conducted in accordance with the Standard Monitoring Provisions specified in Part XIV of this MRP.
- F. **Sampling Methods**
 - 1. Sampling methods shall be fully described in each Permittee's Integrated Monitoring Program (IMP) or Coordinated Integrated Monitoring Program (CIMP) and according to the provisions of the Standard Provisions for Monitoring described in Attachment D to this Order and Part XIV of this MRP.
 - 2. Grab samples shall be taken for constituents that are required to be collected as such (e.g., pathogen indicator bacteria, oil and grease, cyanides, and volatile organics); in instances where grab samples are generally expected to be sufficient to characterize water quality conditions (primarily dry weather); and where the sample location limits Permittees' ability to install an automated sampler, as provided for in an approved IMP or CIMP.

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3. At a minimum, a sufficient volume of sample must be collected to perform all of the required biological and chemical tests, including TIEs where aquatic toxicity is observed during the sample event.
4. Sampling and monitoring methods for trash shall be conducted in accordance with the applicable requirements specified in Part VI.E.5 of this Order.
5. Flow may be estimated using USEPA methods at receiving water monitoring stations where flow measuring equipment is not in place.
6. Flow may be estimated for storm water outfall monitoring based on drainage area, impervious cover, and precipitation data as approved in an IMP or CIMP.

G. Analytical Procedures

1. Suspended-Sediment Concentration (SSC) shall be analyzed per American Society for Testing and Materials (ASTM) Standard Test Method D-3977-97.
2. Monitoring methods for trash shall be conducted in accordance with the applicable requirements specified in Part VI.E.5 of this Order.
3. Aquatic toxicity shall be monitored in accordance with Part XI of this MRP.
4. All other parameters shall be analyzed according to the provisions of the Standard Provisions for Monitoring described in Attachment D to this Order and Part XIV of this MRP.

H. Reporting

1. Reporting requirements related to the monitoring of trash shall be conducted in accordance with Part VI.E.5.c of this Order.
2. Monitoring results submitted to the Regional Water Board shall be consistent with the requirements identified in Part XVIII.A.5 and Part XVIII.A.7 of this MRP.

IV. INTEGRATED MONITORING PROGRAMS

A. Integrated Monitoring Program (IMP)

1. Each Permittee may develop an Integrated Monitoring Program designed to satisfy the monitoring requirements of this Order.
2. The monitoring requirements contained in TMDL Monitoring Plans approved by the Executive Officer of the Regional Water Board are incorporated by reference into this MRP (See Table E-1 for a list of approved TMDL Monitoring Plans).

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3. The Integrated Monitoring Program may leverage monitoring resources by selecting monitoring locations, parameters, or monitoring techniques that will satisfy multiple monitoring requirements.
4. Where appropriate, the Integrated Monitoring Program may develop and utilize alternative approaches to meet the Primary Objectives (Part II.A). Sufficient justification shall be provided in the IMP for the alternative approach(es). Such alternative approaches shall be subject to public review and final approval by the Regional Water Board Executive Officer.
5. The requirements of an approved TMDL Monitoring Plan may be modified by an IMP that is subsequently approved by the Executive Officer of the Regional Water Board.
6. At a minimum, the IMP must address all TMDL and Non-TMDL monitoring requirements of this Order, including receiving water monitoring, storm water outfall based monitoring, non-storm water outfall based monitoring, and regional water monitoring studies, except as provided in Parts IV.B.2 and 3 of this MRP.

B. Coordinated Integrated Monitoring Program (CIMP)

1. Benefits of the CIMP Approach

- a. The CIMP provides Permittees opportunities to increase the cost efficiency and effectiveness of the monitoring program. The greatest efficiency may be achieved when a CIMP is designed and implemented on a watershed basis.
 - b. A CIMP may be employed to implement regional studies, where a single Permittee takes the lead in directing the study, and the other Permittees provide funding or in lieu services.
2. Permittees are encouraged to coordinate their monitoring programs with other Permittees to develop and implement a CIMP. A CIMP may be developed to address one or more of the required monitoring elements (i.e., receiving water monitoring, outfall based monitoring, regional monitoring or special studies) and may be county-wide or limited to a single watershed, sub-watershed or defined jurisdictional boundary.
 3. The requirements of an approved TMDL Monitoring Plan may be modified by an IMP or CIMP that is subsequently approved by the Executive Officer of the Regional Water Board.
 4. A Permittee shall not be required to submit an IMP if all of the applicable monitoring requirements in this Order are addressed in a CIMP, to which the Permittee is a participant.
 5. If the CIMP addresses some but not all of the applicable monitoring requirements required under this Order, then each Permittee shall submit an IMP that references the CIMP. The Permittees must describe how together, the IMP and CIMP, fulfill all of the applicable monitoring requirements contained in this Order.

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6. Where appropriate, the CIMP may develop and utilize alternative approaches to meet the Primary Objectives (Part II.A). Sufficient justification shall be provided in the CIMP for the alternative approach(es). Such alternative approaches shall be subject to public review and final approval by the Regional Water Board Executive Officer.

C. Schedule for Submitting the Monitoring Plan to the Regional Water Board and Conducting Outfall Screening

1. Within six (6) months after the effective date of this Order, each Permittee shall submit a letter of intent to the Executive Officer of the Regional Water Board describing whether it intends to follow an IMP or CIMP approach for each of the required monitoring plan elements.
2. Each Permittee not electing to develop a Watershed Management Program (WMP) or Enhanced Watershed Management Program (EWMP) shall submit an IMP plan addressing monitoring requirements that the Permittee intends to implement individually to the Executive Officer of the Regional Water Board within twelve (12) months after the effective date of this Order.
3. Permittees electing to develop a WMP or EWMP shall submit an IMP or CIMP plan, to the Executive Officer of the Regional Water Board concurrently with their draft WMP.
4. Permittees electing to develop an enhanced WMP shall submit an IMP or CIMP plan to the Executive Officer of the Regional Water Board within 18 months after the effective date of this Order.
5. If upon finalization of the CIMP plan, a Permittee that has developed an IMP determines that its IMP plan must be revised to include monitoring requirements not covered under the final CIMP, the revised IMP plan shall be submitted to the Executive Officer of the Regional Water Board within 60 days after approval of the CIMP plan by the Executive Officer of the Regional Water Board.
6. Monitoring shall commence within 30 days after approval of the IMP, or within 90 days after approval of the CIMP, by the Executive Officer of the Regional Water Board.
7. If a Permittee elects not to develop or participate in an IMP or CIMP, monitoring shall be conducted on a jurisdictional basis per the requirements ~~contained in Parts V through XIII and XIX~~ of this MRP, beginning six (6) months after the effective date of this Order.
8. Monitoring requirements pursuant to Order No. 01-182 and Monitoring and Reporting Program CI 6948, and pursuant to approval TMDL monitoring plans identified in Table E-1, shall remain in effect until the Executive Officer of the Regional Water Board approves a Permittee(s) IMP and/or CIMP plan(s).

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V. TMDL MONITORING PLANS

Table E-1. Approved TMDL Monitoring Plans by Watershed Management Area

TMDL	Comment	Date of Final Plan	Regional Water Board Approval Date
Santa Clara River Watershed Management Area			
Santa Clara River Nitrogen Compounds TMDL	Monitoring Plan was due March 23, 2005.	---	---
Upper Santa Clara River Chloride TMDL	Monitoring Plan was not required.	N/A	N/A
Lake Elizabeth, Munz Lake, and Lake Hughes Trash TMDL (Lake Elizabeth only)	The County of Los Angeles Trash TMDL Monitoring and Reporting Plan for Lake Elizabeth, Munz Lake, and Lake Hughes	June 25, 2009	March 25, 2009
Santa Clara River Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL	Monitoring Plan is due on March 21, 2013.	---	---
Santa Monica Bay Watershed Management Area			
Santa Monica Bay Beaches Bacteria TMDL (Wet and Dry)	Santa Monica Bay Beaches Bacterial TMDLs Coordinated Shoreline Monitoring Plan	April 7, 2004	January 8, 2004
Santa Monica Bay Nearshore and Offshore Debris TMDL	Monitoring Plan is due on September 20, 2012.	---	---
Santa Monica Bay TMDL for DDTs and PCBs	USEPA Established TMDL	N/A	N/A
Malibu Creek Subwatershed			
Malibu Creek and Lagoon Bacteria TMDL	Malibu Creek and Lagoon Bacteria TMDL Compliance Monitoring Plan	February 25, 2008	April 8, 2008
Malibu Creek Watershed Trash TMDL	Malibu Creek Watershed Trash Monitoring and Reporting Plan (TMRP)	April 28, 2010	Has not been approved.

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TMDL	Comment	Date of Final Plan	Regional Water Board Approval Date
Malibu Creek Watershed Nutrients TMDL	USEPA Established TMDL	N/A	N/A
Ballona Creek Subwatershed			
Ballona Creek Trash TMDL	Monitoring Plan was not required.	N/A	N/A
Ballona Creek Estuary Toxic Pollutants TMDL	Ballona Creek Metals TMDL and Ballona Creek Estuary Toxic Pollutants TMDL Coordinated Monitoring Plan	May 4, 2009	June 25, 2009
Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL	Ballona Creek, Ballona Estuary, & Sepulveda Channel Bacteria TMDL Coordinated Monitoring Plan	January 29, 2009	December 16, 2008
Ballona Creek Metals TMDL	Ballona Creek Metals TMDL and Ballona Creek Estuary Toxic Pollutants TMDL Coordinated Monitoring Plan	May 4, 2009	June 25, 2009
Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation	USEPA Established TMDL	N/A	N/A
Marina del Rey Subwatershed			
Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL	Marina Del Rey Harbor Mothers' Beach and Back Basins Bacterial TMDL Coordinated Monitoring Plan	June 25, 2007	February 1, 2007
Marina del Rey Harbor Toxic Pollutants TMDL	Marina Del Rey Harbor Toxic Pollutants Total Maximum Daily Load Coordinated Monitoring Plan	March 31, 2008	March 3, 2009
Dominguez Channel and Greater Harbors Waters Watershed Management Area			

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TMDL	Comment	Date of Final Plan	Regional Water Board Approval Date
Los Angeles Harbor Bacteria TMDL (Inner Cabrillo Beach and Main Ship Channel)	Monitoring Plan was not required.	N/A	N/A
Machado Lake Trash TMDL	Trash Monitoring & Reporting Plan: Machado Lake Trash TMDL	September 5, 2008	December 9, 2008
	City of Rolling Hills Trash Monitoring and Reporting Plan Machado Lake Trash TMDL	September 5, 2008	December 9, 2008
Machado Lake Nutrient TMDL	Palos Verdes Peninsula Coordinated Monitoring Plan In Compliance with the Machado Lake Nutrient Total Maximum Daily Load	February 1, 2011	December 14, 2010
	Machado Lake Nutrients TMDL Lake Water Quality Management Plan for City of Los Angeles	August 18, 2010	February 14, 2011
	Machado Lake Nutrient TMDL Monitoring and Reporting Program Plan for the City of Carson	March 27, 2012	March 7, 2012
	Machado Lake Multipollutant TMDL Monitoring and Reporting Program for the Unincorporated Areas of Los Angeles County within the Machado Lake Watershed	September 12, 2011	April 25, 2012

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TMDL	Comment	Date of Final Plan	Regional Water Board Approval Date
	Monitoring Plans were due from the City of Lomita on April 25, 2011, City of Redondo Beach on March 11, 2010, and City of Torrance on May 16, 2012.	---	---
Machado Lake Pesticides and PCBs TMDL	Monitoring Plan is due on September 20, 2012 ¹ .	---	---
Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL	Monitoring Plan is due on November 23, 2013.	---	---
Los Angeles River Watershed Management Area			
Los Angeles River Watershed Trash TMDL	Monitoring Plan was not required.	N/A	N/A
Los Angeles River Nitrogen Compounds and Related Effects TMDL	Monitoring Plan was due on March 23, 2005.	---	---
Los Angeles River and Tributaries Metals TMDL	Los Angeles River Metals TMDL Coordinated Monitoring Plan	March 25, 2008	April 11, 2008
Los Angeles River Watershed Bacteria TMDL	Monitoring Plan is due on March 23, 2013.	---	---
Legg Lake Trash TMDL	Legg Lake Trash Monitoring & Reporting Plan: Legg Lake Trash TMDL	September 5, 2008	March 25, 2009
Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL	USEPA Established TMDL	N/A	N/A

¹ The deadline for Permittees assigned both WLAs and LAs to submit one document to address both WLA and LA monitoring requirements and implementation activities shall be September 20, 2013.

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TMDL	Comment	Date of Final Plan	Regional Water Board Approval Date
Los Angeles Area Lakes TMDLs (Lake Calabazas, Echo Park Lake, Legg Lake and Peck Road Park Lake)	USEPA Established TMDL	N/A	N/A
San Gabriel River Watershed Management Area			
San Gabriel River and Impaired Tributaries Metals and Selenium TMDL	USEPA Established TMDL	N/A	N/A
Los Angeles Area Lakes TMDLs (Puddingstone Reservoir)	USEPA Established TMDL	N/A	N/A
Los Cerritos Channel and Alamitos Bay Watershed Management Area			
Los Cerritos Channel Metals TMDL	USEPA Established TMDL	N/A	N/A
Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL	Colorado Lagoon TMDL Monitoring Plan (CLTMP)	June 15, 2012	August 23, 2012
Middle Santa Ana River Watershed Management Area			
Middle Santa Ana River Watershed Bacteria Indicator TMDL	Monitoring Plan was due on November 16, 2007.	---	---

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VI. RECEIVING WATER MONITORING

A. IMP Receiving Water Monitoring Requirements

1. All IMP plans must contain the following information for receiving water monitoring:
 - a. Declaration of whether receiving water monitoring is conducted under an IMP, CIMP or both.
 - b. If receiving water monitoring is performed under the IMP, the plan must contain the following information:

- i. A map (preferably GIS) identifying the proposed receiving water monitoring stations for both dry weather and wet weather monitoring.
- ii. An explanation of how and why monitoring at the proposed locations will provide representative measurement of the effects of the Permittee's MS4 discharges on the receiving water.
- iii. Identification of applicable TMDLs and TMDL compliance points, based on approved TMDL Monitoring Plans and/or as identified in the Basin Plan for the applicable TMDLs.
- iv. A description of how the Permittee is fulfilling its obligations for TMDL receiving water monitoring under this IMP, CIMP or other monitoring plans.
- v. A description of how the Permittee is contributing to the monitoring of mass emission stations or a discussion of why monitoring at mass emission stations is not being supported.

B. CIMP Receiving Water Monitoring Requirements

1. The CIMP plan must contain the following information for receiving water monitoring:
 - a. A list of the participating Permittees.
 - b. A map (preferably GIS) delineating the geographic boundaries of the monitoring plan including the receiving waters, the MS4 catchment drainages and outfalls, subwatershed boundaries (i.e., HUC 12), political boundaries, land use, and the proposed receiving water monitoring stations for both dry weather and wet weather receiving water monitoring.
 - c. An explanation of how and why monitoring at the proposed locations will provide representative measurement of the effects of the MS4 discharges on the receiving water.
2. TMDLs
 - a. A list of applicable TMDLs and TMDL compliance points, based on approved TMDL Monitoring Plans and/or as identified in the Basin Plan for the applicable TMDLs.
 - b. Identification of the proposed receiving water monitoring stations that fulfill the TMDL Monitoring Plan(s) requirements.
 - c. Shoreline Monitoring Stations monitored pursuant to a bacteria TMDL. Sampling for bacterial indicators (total coliform, fecal coliform (or E. coli), and enterococcus) at shoreline monitoring locations addressed by a TMDL shall be conducted 5 times per week at sites subject to the reference system criterion for allowable exceedance days, and weekly at sites subject to the antidegradation criterion for allowable exceedance days.
3. Mass Emission Stations
 - a. Location of mass emission stations,

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- b. Description of monitoring at mass emission stations or justification of why monitoring at the mass emission stations will be discontinued.

C. Minimum Wet Weather Receiving Water Monitoring Requirements

1. The IMP or CIMP shall incorporate the following minimum requirements for monitoring the receiving water during wet weather conditions:
 - a. The receiving water shall be monitored a minimum of three times per year for all parameters except aquatic toxicity, which must be monitored at least twice per year, or more frequently if required by applicable TMDL Monitoring Plans.
 - b. Monitoring shall be performed in the receiving water during wet weather conditions, defined for the purposes of this monitoring program as follows:
 - i. When the receiving water is the Santa Monica Bay or other ocean or estuarine water body, wet weather occurs during a storm event of greater than or equal to 0.1 inch of precipitation, as measured from at least 50 percent of the Los Angeles County controlled rain gauges within the watershed, or based on an alternative precipitation threshold as provided for in an approved IMP or CIMP.
 - ii. When the receiving water body is a river, stream or creek, wet weather shall be defined as when the flow within the receiving water is at least 20 percent greater than the base flow or an alternative threshold as provided for in an approved IMP or CIMP, or as defined by effective TMDLs within the watershed.
 - iii. Monitoring shall occur during wet weather conditions, including targeting the first significant rain event of the storm year following the criteria below, and at least two additional wet weather events within the same wet weather season. Permittees shall target the first storm event of the storm year with a predicted rainfall of at least 0.25 inch at a seventy percent probability of rainfall at least 24 hours prior to the event start time. Permittees shall target subsequent storm events that forecast sufficient rainfall and runoff to meet program objectives and site specific study needs. Sampling events shall be separated by a minimum of three days of dry conditions (less than 0.1 inch of rain each day).
 - c. Receiving water monitoring shall begin as soon as possible after storm water outfall-based monitoring, in order to be reflective of potential impacts from MS4 discharges.
 - d. At a minimum, the following parameters shall be monitored unless a surrogate pollutant has been approved by the Executive Officer of the Regional Water Board.
 - i. Flow

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- ii. Pollutants assigned a receiving water limitation derived from TMDL WLAs (See Attachments L-R of this Order),
 - iii. Other pollutants identified on the CWA section 303(d) List for the receiving water or downstream receiving waters,
 - iv. Total Suspended Solids (TSS) and Suspended-Sediment Concentration (SSC) if the receiving water is listed on the CWA section 303(d) list for sedimentation, siltation or turbidity,²
 - v. Field measurements applicable to inland freshwater bodies only: hardness, pH, dissolved oxygen, temperature, and specific conductivity,
 - vi. Aquatic Toxicity (twice per year, once during first storm event of the storm year as specified above).
- e. Additionally, the screening parameters in Table E-2 shall be monitored in the first year of monitoring during the first significant rain event of the storm year. If a parameter is not detected at the Method Detection Limit (MDL) for its respective test method or the result is below the lowest applicable water quality objective, and is not otherwise identified in subparts d.i.-d.vi. above, it need not be further analyzed. If a parameter is detected exceeding the lowest applicable water quality objective then the parameter shall be analyzed for the remainder of the Order during wet weather at the receiving water monitoring station where it was detected.

D. Minimum Dry Weather Receiving Water Monitoring

- 1. The IMP and/or CIMP plan shall incorporate the following minimum requirements for monitoring the receiving water during dry weather conditions:
 - a. The receiving water shall be monitored a minimum of two times per year for all parameters, or more frequently if required by applicable TMDL Monitoring Plans. One of the monitoring events shall be during the month with the historically lowest instream flows, or where instream flow data are not available, during the historically driest month.
 - b. Monitoring shall be performed in the receiving water during dry weather conditions, defined as follows:
 - i. When the receiving water is the Santa Monica Bay or other ocean or estuary water body, dry weather occurs on days with less than 0.1 inch of rain and those days not less than three days after a rain event of 0.1 inch or greater within the watershed, as measured from at least 50 percent of Los Angeles County controlled rain gauges within the

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² Gray, John, R., G. Douglas Glysson, Lisa M. Turcios, and Gregory E. Schwarz. 2000. *Comparability of Suspended-Sediment Concentration and Total Suspended Solids Data*. United States Geological Survey. Water Resources Investigations Report 00-4191. August 2000.

- watershed, or an alternative criterion as provided for in an approved IMP or CIMP.
- ii. When the receiving water body is a river, stream or creek, dry weather shall be defined as when the flow is less than 20 percent greater than the base flow or as defined by effective TMDLs within the watershed, or an alternative criterion as provided for in an approved IMP or CIMP.
- c. At a minimum the following parameters shall be monitored during dry weather conditions, unless a surrogate pollutant has been approved by the Executive Officer of the Regional Water Board:
- i. Flow
 - ii. Pollutants assigned receiving water limitations derived from TMDL dry weather WLAs,
 - iii. Other pollutants identified on the CWA section 303(d) List for the receiving water or downstream receiving waters,
 - iv. TSS and hardness, when metals are monitored,
 - v. Field measurements for monitoring of inland freshwater bodies: dissolved oxygen, pH, temperature, and specific conductivity,
 - vi. Aquatic Toxicity (once per year, during the month with the historically lowest flows).
- d. Additionally, the parameters in Table E-2 shall be monitored in the first year of monitoring during the critical dry weather event. If a parameter is not detected at the Method Detection Limit (MDL) for its respective test method or the result is below the lowest applicable water quality objective, and is not otherwise identified in subparts c.i.-c.iii. or c.v.-c.vii. above, it need not be further analyzed. If a parameter is detected exceeding the lowest applicable water quality objective then the parameter shall be analyzed for the remainder of the Order during dry weather at the receiving water monitoring station where it was detected.

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Table E-2. Storm Water Monitoring Program’s Constituents with Associated Minimum Levels (MLs)³

CONSTITUENTS	MLs
CONVENTIONAL POLLUTANTS	mg/L
Oil and Grease	5
Total Phenols	0.1
Cyanide	0.005
pH	0 - 14
Temperature	N/A

³ For priority pollutants, MLs published in Appendix 4 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California (SIP) shall be used for all analyses, unless otherwise specified. Method Detection Levels (MDLs) must be lower than or equal to the ML value, unless otherwise approved by the Regional Board.

CONSTITUENTS	MLs
Dissolved Oxygen	Sensitivity to 5 mg/L
BACTERIA (single sample limits)	MPN/100ml
Total coliform (marine waters)	10,000
Enterococcus (marine waters)	104
Fecal coliform (marine & fresh waters)	400
E. coli (fresh waters)	235
GENERAL	mg/L
Dissolved Phosphorus	0.05
Total Phosphorus	0.05
Turbidity	0.1 NTU
Total Suspended Solids	2
Total Dissolved Solids	2
Volatile Suspended Solids	2
Total Organic Carbon	1
Total Petroleum Hydrocarbon	5
Biochemical Oxygen Demand	2
Chemical Oxygen Demand	20-900
Total Ammonia-Nitrogen	0.1
Total Kjeldahl Nitrogen	0.1
Nitrate-Nitrite	0.1
Alkalinity	2
Specific Conductance	1 umho/cm
Total Hardness	2
MBAS	0.5
Chloride	2
Fluoride	0.1
Methyl tertiary butyl ether (MTBE)	1
Perchlorate	4 µg/L
METALS (Dissolved & Total)	µg/L
Aluminum	100
Antimony	0.5
Arsenic	1
Beryllium	0.5
Cadmium	0.25
Chromium (total)	0.5
Chromium (Hexavalent)	5
Copper	0.5
Iron	100
Lead	0.5
Mercury	0.5
Nickel	1
Selenium	1
Silver	0.25
Thallium	1
Zinc	1
SEMIVOLATILE ORGANIC COMPOUNDS	
ACIDS	µg/L
2-Chlorophenol	2
4-Chloro-3-methylphenol	1
2,4-Dichlorophenol	1
2,4-Dimethylphenol	2
2,4-Dinitrophenol	5

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CONSTITUENTS	MLs
2-Nitrophenol	10
ACIDS	µg/L
4-Nitrophenol	5
Pentachlorophenol	2
Phenol	1
2,4,6-Trichlorophenol	10
BASE/NEUTRAL	µg/L
Acenaphthene	1
Acenaphthylene	2
Anthracene	2
Benzidine	5
1,2 Benzanthracene	5
Benzo(a)pyrene	2
Benzo(g,h,i)perylene	5
3,4 Benzoflouranthene	10
Benzo(k)flouranthene	2
Bis(2-Chloroethoxy) methane	5
Bis(2-Chloroisopropyl) ether	2
Bis(2-Chloroethyl) ether	1
Bis(2-Ethylhexl) phthalate	5
4-Bromophenyl phenyl ether	5
Butyl benzyl phthalate	10
2-Chloroethyl vinyl ether	1
2-Chloronaphthalene	10
4-Chlorophenyl phenyl ether	5
Chrysene	5
Dibenzo(a,h)anthracene	0.1
1,3-Dichlorobenzene	1
1,4-Dichlorobenzene	1
1,2-Dichlorobenzene	1
3,3-Dichlorobenzidine	5
Diethyl phthalate	2
Dimethyl phthalate	2
di-n-Butyl phthalate	10
2,4-Dinitrotoluene	5
2,6-Dinitrotoluene	5
4,6 Dinitro-2-methylphenol	5
1,2-Diphenylhydrazine	1
di-n-Octyl phthalate	10
Fluoranthene	0.05
Fluorene	0.1
Hexachlorobenzene	1
Hexachlorobutadiene	1
Hexachloro-cyclopentadiene	5
Hexachloroethane	1
Indeno(1,2,3-cd)pyrene	0.05
Isophorone	1
Naphthalene	0.2
Nitrobenzene	1
N-Nitroso-dimethyl amine	5
N-Nitroso-diphenyl amine	1
N-Nitroso-di-n-propyl amine	5

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CONSTITUENTS	MLs
Phenanthrene	0.05
BASE/NEUTRAL	µg/L
Pyrene	0.05
1,2,4-Trichlorobenzene	1
CHLORINATED PESTICIDES	µg/L
Aldrin	0.005
alpha-BHC	0.01
beta-BHC	0.005
delta-BHC	0.005
gamma-BHC (lindane)	0.02
alpha-chlordane	0.1
gamma-chlordane	0.1
4,4'-DDD	0.05
4,4'-DDE	0.05
4,4'-DDT	0.01
Dieldrin	0.01
alpha-Endosulfan	0.02
beta-Endosulfan	0.01
Endosulfan sulfate	0.05
Endrin	0.01
Endrin aldehyde	0.01
Heptachlor	0.01
Heptachlor Epoxide	0.01
Toxaphene	0.5
POLYCHLORINATED BIPHENYLS	µg/L
Aroclor-1016	0.5
Aroclor-1221	0.5
Aroclor-1232	0.5
Aroclor-1242	0.5
Aroclor-1248	0.5
Aroclor-1254	0.5
Aroclor-1260	0.5
ORGANOPHOSPHATE PESTICIDES	µg/L
Atrazine	2
Chlorpyrifos	0.05
Cyanazine	2
Diazinon	0.01
Malathion	1
Prometryn	2
Simazine	2
HERBICIDES	µg/L
2,4-D	10
Glyphosate	5
2,4,5-TP-SILVEX	0.5

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VII. OUTFALL BASED MONITORING

A. Storm Drains, Channels and Outfalls Map(s) and/or Database. The IMP and/or CIMP plan(s) shall include a map(s) and/or database of the MS4 to include the following information:

1. Surface water bodies within the Permittee(s) jurisdiction
2. Sub-watershed (HUC 12) boundaries
3. Land use overlay
4. Effective Impervious Area (EIA) overlay (if available)
5. Jurisdictional boundaries
6. The location and length of all open channel and underground pipes 18 inches in diameter or greater (with the exception of catch basin connector pipes)
7. The location of all dry weather diversions
8. The location of all major MS4 outfalls within the Permittee's jurisdictional boundary. Each major outfall shall be assigned an alphanumeric identifier, which must be noted on the map
9. Notation of outfalls with significant non-storm water discharges (to be updated annually)
10. Storm drain outfall catchment areas for each major outfall within the Permittee(s) jurisdiction
11. Each mapped MS4 outfall shall be linked to a database containing descriptive and monitoring data associated with the outfall. The data shall include:
 - a. Ownership
 - b. Coordinates
 - c. Physical description
 - d. Photographs of the outfall, where possible, to provide baseline information to track operation and maintenance needs over time
 - e. Determination of whether the outfall conveys significant non-storm water discharges
 - f. Storm water and non-storm water monitoring data

VIII. STORM WATER OUTFALL BASED MONITORING

A. Storm Water Outfall Based Monitoring

1. Storm water discharges from the MS4 shall be monitored at outfalls and/or alternative access points such as manholes or in channels at the Permittee's jurisdictional boundary.
2. The Permittee shall consider the following criteria when selecting outfalls for storm water discharge monitoring:
 - a. The storm water outfall based monitoring program should ensure representative data by monitoring at least one major outfall per subwatershed (HUC 12) drainage area, within the Permittee's jurisdiction, or alternate approaches as approved in an IMP or CIMP.

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- b. The drainage(s) to the selected outfall(s) shall be representative of the land uses within the Permittee’s jurisdiction.
- c. If a Permittee is implementing an IMP, to the extent possible, the selected outfalls shall not receive drainage from another jurisdiction. If this is not possible, and a Permittee is pursuing an individual outfall based IMP program, the Permittee shall conduct “upstream” and “downstream” monitoring as the system enters and exits the Permittee’s jurisdiction.
- d. The Permittee shall select outfalls with configurations that facilitate accurate flow measurement and in consideration of safety of monitoring personnel.
- e. The specific location of sample collection may be within the MS4 upstream of the actual outfall to the receiving water if field safety or accurate flow measurement require it.

B. Minimum Storm Water Outfall Based Monitoring Requirements

- 1. The IMP and/or CIMP shall incorporate the following minimum requirements for monitoring storm water:
 - a. Storm water discharges shall be monitored a minimum of three times per year for all parameters except aquatic toxicity.
 - b. Monitoring shall be performed at the selected outfalls during wet weather conditions, defined for the purposes of this monitoring program as follows:
 - i. When the receiving water is the Santa Monica Bay or other ocean or estuary water body, wet weather occurs during a storm event equal to or greater than 0.1 inch of precipitation, as determined by the closest Los Angeles County rain gauge to the catchment area draining to the outfall, or based on an alternative precipitation threshold as provided for in an approved IMP or CIMP.
 - ii. When the receiving water body is a river, stream or creek, wet weather shall be defined as when the flow within the receiving water is at least 20 percent greater than the base flow or an alternative threshold as provided for in an approved IMP or CIMP, or as defined by effective TMDLs within the watershed.
 - iii. Monitoring of storm water discharges shall occur during wet weather conditions resulting from the first rain event of the year, and at least two additional wet weather events within the same wet weather season. Permittees shall target the first storm event of the storm year with a predicted rainfall of at least 0.25 inch at a seventy percent probability of rainfall at least 24 hours prior to the event start time. Permittees shall target subsequent storm events that forecast sufficient rainfall and runoff to meet program objectives and site specific study needs. Sampling events shall be separated by a minimum of three days of dry conditions (less than 0.1 inch of rain each day).

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- c. At a minimum, the following parameters shall be monitored unless a surrogate pollutant has been approved by the Executive Officer of the Regional Water Board:
 - i. Flow
 - ii. Pollutants assigned a WQBEL derived from TMDL WLAs (See Attachments L-R of this Order),
 - iii. Other pollutants identified on the CWA section 303(d) List for the receiving water or downstream receiving waters,
 - iv. Total Suspended Solids (TSS) and Suspended-Sediment Concentration (SSC) if the receiving water is listed on the CWA Section 303(d) list for sedimentation, siltation or turbidity,
 - v. Field measurements applicable to inland freshwater bodies only: hardness, pH, dissolved oxygen, temperature, and specific conductivity,
 - vi. Pollutants identified in a TIE conducted at the downstream receiving water monitoring station during the most recent sample event, or where the TIE conducted on the receiving water sample was inconclusive, aquatic toxicity. If the discharge exhibits aquatic toxicity, then a TIE shall be conducted.
- d. Other parameters in Table E-2 identified as exceeding the lowest applicable water quality objective in the nearest downstream receiving water monitoring station per Part VI.C.1.e.

C. Sampling Methods

- 1. Samples shall be collected during the first 24 hours of the storm water discharge or for the entire storm water discharge if it is less than 24 hours.
- 2. If a Permittee is not participating in a IMP or CIMP, the flow-weighted composite sample for a storm water discharge shall be taken with a continuous sampler, or it shall be taken as a combination of a minimum of 3 sample aliquots, taken in each hour of discharge for the first 24 hours of the discharge or for the entire discharge if the storm event is less than 24 hours, with each aliquot being separated by a minimum of 15 minutes within each hour of discharge, unless the Regional Water Board Executive Officer approves an alternate protocol.

IX. NON-STORM WATER OUTFALL BASED SCREENING AND MONITORING

A. Objectives of the Non-Storm Water Outfall Screening and Monitoring Program

The outfall screening and monitoring process is intended to meet the following objectives.

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1. Develop criteria or other means to ensure that all outfalls with significant non-storm water discharges are identified and assessed during the term of this Order.
2. For outfalls determined to have significant non-storm water flow, determine whether flows are the result of illicit connections/illicit discharges (IC/IDs), authorized or conditionally exempt non-storm water flows, natural flows, or from unknown sources.
3. Refer information related to identified IC/IDs to the IC/ID Elimination Program (Part VI.D.10 of this Order) for appropriate action.
4. Based on existing screening or monitoring data or other institutional knowledge, assess the impact of non-storm water discharges (other than identified IC/IDs) on the receiving water.
5. Prioritize monitoring of outfalls considering the potential threat to the receiving water and applicable TMDL compliance schedules.
6. Conduct monitoring or assess existing monitoring data to determine the impact of non-storm water discharges on the receiving water.
7. Conduct monitoring or other investigations to identify the source of pollutants in non-storm water discharges.
8. Use results of the screening process to evaluate the conditionally exempt non-storm water discharges identified in Parts III.A.2 and III.A.3 of this Order and take appropriate actions pursuant to Part III.A.4.d of this Order for those discharges that have been found to be a source of pollutants. Any future reclassification shall occur per the conditions in Parts III.A.2 or III.A.6 of this Order.
9. Maximize the use of Permittee resources by integrating the screening and monitoring process into existing or planned IMP and/or CIMP efforts.

B. Outfall Screening and Monitoring Plan

1. Concurrent with the development of an IMP or CIMP, or within one (1) year of the effective date of this Order, each Permittee shall submit a non-storm water outfall-based screening and monitoring program plan that documents with written procedures an explanation of how the program is to be implemented. The procedures must be updated as needed to reflect the Permittee's program. The plan may be a separate stand-alone document or may be part of an IMP or CIMP.
2. Each Permittee shall conduct at least one re-assessment of its non-storm water outfall-based screening and monitoring program during the term of this Order to determine whether changes or updates are needed. Where changes are needed, the Permittee shall make the changes in its written program documents, implement these changes in practice, and describe the changes within the next annual report.

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C. Identification of Outfalls with Significant with Non-Storm Water Discharge

1. Based on the inventory of MS4 outfalls required under Part VII of this MRP, each Permittee shall identify MS4 outfalls with significant non-storm water discharges. Significant non-storm water discharges may be determined by one or more of the following characteristics:
 - a. Discharges from major outfalls subject to dry weather TMDLs.
 - b. Discharges for which existing monitoring data exceeds non-storm water Action Levels identified in Attachment G of this Order.
 - c. Non-storm water discharges that have caused or have the potential to cause overtopping of downstream diversions.
 - d. Discharges exceeding a proposed threshold discharge rate as determined by the Permittee.
 - e. Other characteristics as determined by the Permittee and incorporated within their screening program plan.

D. Inventory of MS4 Outfalls with Non-Storm Water Discharges

1. Each Permittee shall develop and maintain an inventory of MS4 outfalls and identify those with known significant non-storm water discharges and those requiring no further assessment. If the MS4 outfall requires no further assessment, the inventory must include the rationale for the determination of no further action required. This inventory shall be recorded in a database with outfall locations linked to the Storm Drains, Channels and Outfalls map required in Part VII.A of this MRP. GIS is preferred.
2. As a component of the inventory, each Permittee shall record existing data from past outfall screening and monitoring and initiate data collection efforts as warranted. The data shall include the physical attributes of those MS4 outfalls or alternative monitoring locations determined to have significant non-storm water discharges. Attributes to be obtained shall, at a minimum, include:
 - a. Date and time of last visual observation or inspection
 - b. Outfall alpha-numeric identifier
 - c. Description of outfall structure including size (e.g., diameter and shape)
 - d. Description of receiving water at the point of discharge (e.g., natural, soft-bottom with armored sides, trapezoidal, concrete channel)
 - e. Latitude/longitude coordinates
 - f. Nearest street address
 - g. Parking, access, and safety considerations
 - h. Photographs of outfall condition

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- i. Photographs of significant non-storm water discharge (or indicators of discharge) unless safety considerations preclude obtaining photographs
 - j. Estimation of discharge rate
 - k. All diversions either upstream or downstream of the outfall
 - l. Observations regarding discharge characteristics such as turbidity, odor, color, presence of debris, floatables, or characteristics that could aid in pollutant source identification.
4. Each year, the Storm Drains, Channels and Outfalls map and associated outfall database required in Part VII.A of the MRP shall be updated to incorporate the most recent characterization data for outfalls with significant non-storm water discharge.

E. Prioritized Source Identification

- 1. Outfalls within the inventory shall be prioritized in the following order (a= highest priority, etc.) for source identification activities:
 - a. Outfalls discharging directly to receiving waters with WQBELs or receiving water limitations in the TMDL provisions for which final compliance deadlines have passed.
 - b. All major outfalls and other outfalls that discharge to a receiving water subject to a TMDL shall be prioritized according to TMDL compliance schedules.
 - c. Outfalls for which monitoring data exist and indicate recurring exceedances of one or more of the Action Levels identified in Attachment G of this Order.
 - d. All other major outfalls identified to have significant non-storm water discharges.
- 2. Each Permittee shall develop a source identification schedule based on the prioritized list of outfalls exhibiting significant non-storm water discharges. The schedule shall ensure that source investigations are conducted for no less than 25% of the outfalls in the inventory within three years of the effective date of this Order and 100% of the outfalls in the inventory within 5 years of the effective date of this Order.
- 3. Alternatively, a Permittee may request an alternative prioritization and schedule from the Regional Water Board if it can demonstrate an equivalent level of source investigation and abatement through an approved IMP or CIMP.

F. Identify Source(s) of Significant Non-Storm Water Discharge

- 1. If the source is determined to be an illicit discharge, each Permittee shall implement procedures to eliminate the discharge consistent with IC/ID requirements and document the actions in the next annual report.

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2. If the source is determined to be an NPDES permitted discharge, a discharge subject to a Record of Decision approved by USEPA pursuant to section 121 of CERCLA, a conditionally exempt essential non-storm water discharge, or entirely comprised of natural flows as defined at Part III.A.d of this Order, document the source and report to the Regional Water Board in the next annual report.
3. If the source is either unknown or a conditionally exempt, but non-essential, non-storm water discharge, each Permittee shall conduct monitoring required in Part IX.G of this MRP.
4. If the discharge is comprised of more than one source, the Permittee shall attempt to quantify the relative contribution from the individual or group of similar sources (e.g., irrigation overspray) and classify the contributions as authorized, conditionally exempt essential, natural, illicit discharge, conditionally exempt non-essential, or unknown.
5. If the source of non-storm water discharge is unknown, the Permittee shall describe the efforts undertaken to identify the source. Methods for identifying the source of non-storm water discharge may include inspection and/or surveillance, discharge monitoring and data loggers, video or physical inspection, monitoring for indicator parameters (e.g., surfactants, chlorine, Pyrethroids), or other means.
6. If a source originates within an upstream jurisdiction, the Permittee shall inform in writing both the upstream jurisdiction and the Regional Water Board within 30 days of determination of the presence of the discharge, all available characterization data, contribution determination efforts, and efforts taken to identify its source.
7. MS4 outfalls requiring no further action shall be maintained in the Storm Drains, Channels and Outfalls map and associated database (see Part VII.A. of this MRP).

G. Monitor Non-Storm Water Discharges Exceeding Criteria

1. Within 90 days after completing the source identification or after the Executive Officer of the Regional Water Board approves the IMP or CIMP, whichever is later, each Permittee shall monitor outfalls that have been determined to convey significant discharges comprised of either unknown or conditionally exempt non-storm water discharges, or continuing discharges attributed to illicit discharges. The following parameters shall be monitored:
 - a. Flow,
 - b. Pollutants assigned a WQBEL or receiving water limitation to implement TMDL Provisions for the respective receiving water, as identified in Attachments L - R of this Order,
 - c. Other pollutants identified on the CWA section 303(d) List for the receiving water or downstream receiving waters,

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- d. Pollutants identified in a TIE conducted in response to observed aquatic toxicity during dry weather at the nearest downstream receiving water monitoring station during the last sample event or, where the TIE conducted on the receiving water sample was inconclusive, aquatic toxicity. If the discharge exhibits aquatic toxicity, then a TIE shall be conducted.
 - e. Other parameters in Table E-2 identified as exceeding the lowest applicable water quality objective in the nearest downstream receiving water monitoring station per Part VI.D.1.d.
2. For outfalls subject to a dry weather TMDL, monitoring frequency shall be per the approved TMDL Monitoring Plan or as otherwise specified in the TMDL, or as specified in an IMP or CIMP approved by the Executive Officer of the Regional Water Board.
 3. For outfalls not subject to dry weather TMDLs, monitoring frequency shall be four times during the first year following source identification, distributed approximately quarterly, during dry weather conditions or as specified in an IMP or CIMP approved by the Executive Officer of the Regional Water Board.
 4. Except as required by an applicable TMDL Monitoring Plan, IMP, or CIMP approved by the Executive Officer of the Regional Water Board, monitoring frequency may be reduced to twice per year, beginning in the second year of monitoring, if pollutant concentrations measured during the first year do not exceed WQBELs, non-storm water Action Levels or water quality standards for other pollutants identified on the CWA section 303(d) List for the receiving water or downstream receiving waters.
 5. Following ~~two~~one years of monitoring, the Permittee may submit a written request to the Executive Officer of the Regional Water Board to reduce or eliminate monitoring of specified pollutants, based on an evaluation of the monitoring data.

H. Sampling Methods

1. For the purposes of this monitoring program, non-storm water discharges shall be monitored during days when precipitation is < 0.1 inch and those days not less than 3 days after a rain day unless an alternative criterion is provided for in an approved IMP or CIMP. A rain day is defined as those with ≥ 0.1 inch of rain.
2. Flow-weighted composite samples shall be taken for a non-storm water discharge using a continuous sampler, or it shall be taken as a combination of a minimum of 3 sample aliquots, taken in each hour during a 24-hour period, unless the Regional Water Board Executive Officer approves an alternate protocol.

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X. NEW DEVELOPMENT/RE-DEVELOPMENT EFFECTIVENESS TRACKING

A. Each Permittee shall maintain a database providing the following information for each new development/re-development subject to the requirements of Part VI.D.6 of this Order that is approved by the Permittee on or after the effective date of this Order:

1. Name of the Project and Developer,
2. Project location and map (preferably linked to the GIS storm drain map),
3. Date of Certificate of Occupancy,
4. 85th percentile storm event for the project design (inches per 24 hours),
5. 95th percentile storm event for projects draining to natural water bodies (inches per 24 hours),
6. Other design criteria required to meet hydromodification requirements for drainages to natural water bodies,
7. Project design storm (inches per 24-hours),
8. Project design storm volume (gallons or MGD),
9. Percent of design storm volume to be retained on site,
10. Design volume for water quality mitigation treatment BMPs, if any.
11. If flow through, water quality treatment BMPs are approved, provide the one-year, one-hour storm intensity as depicted on the most recently issued isohyetal map published by the Los Angeles County Hydrologist,
12. Percent of design storm volume to be infiltrated at an off-site mitigation or groundwater replenishment project site,
13. Percent of design storm volume to be retained or treated with biofiltration at an off-site retrofit project,
14. Location and maps (preferably linked to the GIS storm drain map required in Part VII.A of this MRP) of off-site mitigation, groundwater replenishment, or retrofit sites,
15. Documentation of issuance of requirements to the developer.

XI. REGIONAL STUDIES

A. Southern California Stormwater Monitoring Coalition Watershed Monitoring Program

1. The Southern California Stormwater Monitoring Coalition (SMC) Regional Watershed Monitoring Program was initiated in 2008. This program is conducted in collaboration with the Southern California Coastal Water Research Project (SCCWRP), State Water Board’s Surface Water Ambient Monitoring Program, three Southern California Regional Water Quality Control Boards (Los Angeles, Santa Ana, and San Diego) and several county storm water agencies (Los Angeles, Ventura, Orange, Riverside, [San](#)

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- Bernardino and San Diego). SCCWRP acts as the facilitator to organize the program and completes data analysis and report preparation.
2. The SMC monitoring program seeks to coordinate and leverage existing monitoring efforts to produce regional estimates of condition, improve data comparability and quality assurance, and maximize data availability, while conserving monitoring expenditures. The primary goal of this program is to implement an ongoing, large-scale regional monitoring program for southern California's coastal streams and rivers. The monitoring program addresses three main questions:
 - a. What is the condition of streams in southern California?
 - b. What are the stressors that affect stream condition?; and
 - c. Are conditions getting better or worse?
 3. A comprehensive program was designed by the SMC, in which each participating group assesses its local watersheds and then contributes their portion to the overall regional assessment. The program utilizes the following indicators: benthic macroinvertebrate community bioassessment, benthic algal community bioassessment (soft algae and diatoms), riparian wetland evaluation (using California Rapid Assessment Methodology), water chemistry (nutrients and certain pesticides), water toxicity (using *Ceriodaphnia*), and physical habitat. Sampling occurs in 15 coastal southern California watersheds from Ventura to the US-Mexico border, and sites are sampled randomly across three land use types (open space, urban and agriculture). Six sites are sampled per year per watershed, resulting in monitoring of 90 sites per year and 450 sites overall over a five-year period (reaching the statistically desirable target of 30 data points per watershed).
 4. To continue to implement the SMC design, each Permittee shall be responsible for supporting the monitoring described at the sites within the watershed management area(s) that overlap with the Permittee's jurisdictional area. These include six random sites annually in the Santa Monica Bay Watershed Management area and at three random sites annually in the Santa Clara River Watershed (the other three sites are funded by the Ventura County MS4 Permittees). Permittees shall continue to contribute monitoring resources to the San Gabriel River and Los Angeles River Regional Watershed Monitoring Programs (overall, both of these programs fund six sites per year to contribute to the SMC Program).

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XII. AQUATIC TOXICITY MONITORING METHODS

- A.** Aquatic Toxicity Monitoring as required in Parts VI (Receiving Water Monitoring), VIII (Storm Water Outfall Based Monitoring), and IX (Non-storm Water Outfall Based Monitoring) of this MRP, shall be conducted according to the procedures described in this Part. When the State Water Board's *Policy for Toxicity Assessment and Control* is fully approved and in effect, the Regional Water Board Executive Officer may direct the Permittee(s) to replace current toxicity program elements with standardized procedures in the policy.
- B.** The Permittee(s) shall collect and analyze samples taken from receiving water monitoring locations to evaluate the extent and causes of toxicity in receiving waters.
- C.** Toxicity samples may be flow-weighted composite samples, or grab samples, for wet and dry event sampling.
- D.** The total sample volume shall be determined both by the specific toxicity test method used and the additional volume necessary for TIE studies. Sufficient sample volume shall be collected to perform both the required toxicity tests and TIE studies.
- E.** Holding Times. All toxicity tests shall be conducted as soon as possible following sample collection. The 36-hour sample holding time for test initiation shall be targeted. However, no more than 72 hours shall elapse before the conclusion of sample collection and test initiation.
- F.** Definition of Chronic Toxicity. Chronic toxicity measures a sublethal effect (e.g., reduced growth, reproduction) to experimental test organisms exposed to an effluent or receiving waters compared to that of the control organisms.
- G. Chronic Toxicity Monitoring Programs.**
- 1. Freshwater Test Species and Methods.**
- If samples are collected in receiving waters with salinity <1 ppt, or from outfalls discharging to receiving waters with salinity <1 ppt, then the Permittee(s) shall conduct the following critical life stage chronic toxicity tests on undiluted samples in accordance with species and short-term test methods in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002; Table IA, 40 CFR Part 136). In no case shall the following test species be substituted with another organism unless written authorization from the Regional Water Board Executive Officer is received.
- i.** A static renewal toxicity test with the fathead minnow, *Pimephales promelas* (Larval Survival and Growth Test Method 1000.0⁴).

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⁴ Daily observations for mortality make it possible to calculate acute toxicity for desired exposure periods (e.g., a 7-day acute endpoint).

- ii. A static renewal toxicity test with the daphnid, *Ceriodaphnia dubia* (Survival and Reproduction Test Method 1002.0⁵).
 - iii. A static renewal toxicity test with the green alga, *Selenastrum capricornutum* (also named *Raphidocelis subcapitata*) (Growth Test Method 1003.0).
2. Marine and Estuarine Test Species and Methods.

If samples are collected in receiving waters with salinity ≥ 1 ppt, or from outfalls discharging to receiving waters with salinity ≥ 1 ppt, then the Permittee(s) shall conduct the following critical life stage chronic toxicity tests on undiluted samples in accordance with species and short-term test methods in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, 1995). Artificial sea salts shall be used to increase sample salinity. In no case shall the following test species be substituted with another organism unless written authorization from the Regional Water Board Executive Officer is received.

- a. A static renewal toxicity test with the topsmelt, *Atherinops affinis* (Larval Survival and Growth Test Method 1006.01⁵);
 - b. A static non-renewal toxicity test with the purple sea urchin, *Strongylocentrotus purpuratus* (Fertilization Test Method 1008.0); and
 - c. A static non-renewal toxicity test with the giant kelp, *Macrocystis pyrifera* (Germination and Growth Test Method 1009.0).
3. Test Species Sensitivity Screening.

To determine the most sensitive test species, the Permittee(s) shall conduct two wet weather and two dry weather toxicity tests with a vertebrate, an invertebrate, and a plant. After this screening period, subsequent monitoring shall be conducted using the most sensitive test species. Alternatively, if a sensitive test species has already been determined, or if there is prior knowledge of potential toxicant(s) and a test species is sensitive to such toxicant(s), then monitoring shall be conducted using only that test species. Sensitive test species determinations shall also consider the most sensitive test species used for proximal receiving water monitoring. After the screening period, subsequent monitoring shall be conducted using the most sensitive test species. Rescreening shall occur in the fourth year of the permit term.

4. Chronic toxicity test biological endpoint data shall be analyzed using the Test of Significant Toxicity t-test approach specified in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (U.S. Environmental Protection Agency, Office of Wastewater Management, Washington, D.C. EPA 833-R-10-003, 2010-). For this monitoring program, the critical chronic instream waste concentration (IWC) is set at 100% receiving water for receiving water samples and 100% effluent

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for wet- and dry-weather outfall samples. A 100% receiving water/outfall effluent sample and a control shall be tested.

H. Quality Assurance.

1. If the receiving water or outfall effluent test does not meet all test acceptability criteria (TAC) specified in the test methods manuals (*Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002) and *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, 1995)), then the Permittee(s) must re-sample and re-test at the earliest time possible.
2. Control water, including brine controls, shall be laboratory water prepared and used as specified in the test methods manuals.
3. If organisms are not cultured in-house, then concurrent testing with a reference toxicant shall be conducted. If organisms are cultured in-house, then monthly reference toxicant testing is sufficient. Reference toxicant tests and effluent toxicity tests shall be conducted using the same test conditions (e.g., same test duration, etc.).

I. Toxicity Identification Evaluation (TIE).

1. A toxicity test sample is immediately subject to TIE procedures to identify the toxic chemical(s), if either the survival or sublethal endpoint demonstrates a Percent Effect value equal to or greater than 50% at the IWC. Percent Effect is defined as the effect value—denoted as the difference between the mean control response and the mean IWC response, divided by the mean control response—multiplied by 100.
2. A TIE shall be performed to identify the causes of toxicity using the same species and test method and, as guidance, U.S. EPA manuals: *Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I* (EPA/600/6-91/005F, 1992); *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/080, 1993); *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/081, 1993); and *Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document* (EPA/600/R-96-054, 1996).
3. The TIE should be conducted on the test species demonstrating the most sensitive toxicity response at a sampling station. A TIE may be conducted on a different test species demonstrating a toxicity response with the caveat that once the toxicant(s) are identified, the most sensitive test species triggering the TIE shall be further tested to verify that the toxicant has been identified and addressed.
4. A TIE Prioritization Metric (see Appendix 5 in SMC Model Monitoring Program) may be utilized to rank sites for TIEs.

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J. Toxicity Reduction Evaluation (TRE).

1. When a toxicant or class of toxicants is identified through a TIE conducted at a receiving water monitoring station, Permittees shall analyze for the toxicant(s) during the next scheduled sampling event in the discharge from the outfall(s) upstream of the receiving water location.
2. If the toxicant is present in the discharge from the outfall at levels above the applicable receiving water limitation, a TRE shall be performed for that toxicant.
3. The TRE shall include all reasonable steps to identify the source(s) of toxicity and discuss appropriate BMPs to eliminate the causes of toxicity. No later than 30 days after the source of toxicity and appropriate BMPs are identified, the Permittee(s) shall submit a TRE Corrective Action Plan to the Regional Water Board Executive Officer for approval. At minimum, the plan shall include a discussion of the following:
 - a. The potential sources of pollutant(s) causing toxicity.
 - b. A list of municipalities and agencies that may have jurisdiction over sources of pollutant(s) causing toxicity.
 - c. Recommended BMPs to reduce the pollutant(s) causing toxicity.
 - d. Proposed post-construction control measures to reduce the pollutant(s) causing toxicity.
 - e. Follow-up monitoring to demonstrate that the toxicants have been reduced or eliminated.
4. The TRE process shall be coordinated with TMDL development and implementation (i.e., if a TMDL for 4,4'-DDD is being implemented when a TRE for 4,4'-DDD is required, then efforts shall be coordinated to avoid overlap).

K. Chronic Toxicity Reporting

1. Aquatic toxicity monitoring results submitted to the Regional Water Board shall be consistent with the requirements identified in Part XIV.L and M and Part XVIII.A.5 and A.7 of the MRP.
2. The Annual Report in Part XVIII of the MRP shall include:
 - a. A full laboratory report for each chronic toxicity test prepared according to the appropriate test methods manual chapter on Report Preparation, including:
 - i. The chronic toxicity test results for the t-test, reported as "Pass" or "Fail", and the "Percent Effect".
 - ii. The dates of sample collection and initiation of each toxicity test.
 - iii. Test species with biological endpoint values for each concentration tested.

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- iv. Reference toxicant test results.
- v. Water quality measurements for each toxicity test (e.g., pH, dissolved oxygen, temperature, conductivity, hardness, salinity, chlorine, ammonia).
- vi. TRE/TIE testing results.
- vii. A printout of CETIS (Comprehensive Environmental Toxicity Information System) program results.
- b. All results for receiving water or outfall effluent parameters monitored concurrently with the toxicity test.
- c. TIEs (Phases I, II, and III) that have been completed or are being conducted, by monitoring station.
- d. The development, implementation, and results for each TRE Corrective Action Plan, beginning the year following the identification of each pollutant or pollutant class causing chronic toxicity.

XIII. SPECIAL STUDIES

- A. Each Permittee shall be responsible for conducting special studies required in an effective TMDL or an approved TMDL Monitoring Plan applicable to a watershed that transects its political boundary.

XIV. STANDARD MONITORING AND REPORTING PROVISIONS

- A. All monitoring and reporting activities shall meet the following requirements.
 - 1. Monitoring and Records [40 CFR section 122.41(j)(1)]
 - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - b. Monitoring and Records [40 CFR section 122.41(j)(2)] [California Water Code § 13383(a)]
 - i. Permittees shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the Report of Waste Discharge (ROWD) and application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report, or application. This period may be extended by request of the Regional Water Board Executive Officer or USEPA at any time.
 - c. Monitoring and Records [40 CFR section 122.41(j)(3)]
 - i. Records of monitoring information shall include:

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1. The date, time of sampling or measurements, exact place, weather conditions, and rain fall amount.
 2. The individual(s) who performed the sampling or measurements.
 3. The date(s) analyses were performed.
 4. The individual(s) who performed the analyses.
 5. The analytical techniques or methods used.
 6. The results of such analyses.
 7. The data sheets showing toxicity test results.
- d. Monitoring and Records [40 CFR section 122.41(j)(4)]. All monitoring, sampling, sample preservation, and analyses must be conducted according to test procedures approved under 40 CFR Part 136 for the analysis of pollutants, unless another test procedure is required under 40 CFR subchapter N or O or is otherwise specified in this Order for such pollutants. If a particular Minimum Level (ML) is not attainable in accordance with procedures set forth in 40 CFR Part 136, the lowest quantifiable concentration of the lowest calibration standard analyzed by a specific analytical procedure may be used instead.
- e. Monitoring and Records [40 CFR section 122.41(j)(5)]. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this Order shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or both.
- B.** All chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory:
1. Certified for such analyses by an appropriate governmental regulatory agency.
 2. Participated in “Intercalibration Studies” for storm water pollutant analysis conducted by the SMC.⁵
 3. Which performs laboratory analyses consistent with the storm water monitoring guidelines as specified in, the *Stormwater Monitoring Coalition Laboratory Guidance Document*, 2nd Edition R. Gossettt and K. Schiff (2007), and its revisions.

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⁵ The ‘Intercalibration Studies’ are conducted periodically by the SMC to establish a consensus based approach for achieving minimal levels of comparability among different testing laboratories for storm water samples to minimize analytical procedure bias. Stormwater Monitoring Coalition Laboratory Document, Technical Report 420 (2004) and subsequent revisions and augmentations.

- C. For priority toxic pollutants that are identified in the CTR (~~65 Fed. Reg. 3168240~~ CFR §131.38), the MLs published in Appendix 4 of the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California* (SIP) shall be used for all analyses, unless otherwise specified.
- D. The Monitoring Report shall specify the analytical method used, the Method Detection Level (MDL) and the ML for each pollutant. For the purpose of reporting compliance with numerical limitations, performance goals, and receiving water limitations, analytical data shall be reported with one of the following methods, as appropriate:
1. An actual numerical value for sample results greater than or equal to the ML.
 2. "Not-detected (ND)" for sample results less than the laboratory's MDL with the MDL indicated for the analytical method used.
 3. "Detected, but Not Quantified (DNQ)" if results are greater than or equal to the laboratory's MDL but less than the ML. The estimated chemical concentration of the sample shall also be reported. This is the concentration that results from the confirmed detection of the substance by the analytical method below the ML value.
- E. For priority toxic pollutants, if the Permittee can demonstrate that a particular ML is not attainable, in accordance with procedures set forth in 40 CFR Part 136, the lowest quantifiable concentration of the lowest calibration standard analyzed by a specific analytical procedure (assuming that all the method specified sample weights, volumes, and processing steps have been followed) may be used instead of the ML listed in Appendix 4 of the SIP. The Permittee must submit documentation from the laboratory to the Regional Water Board Executive Officer for approval prior to raising the ML for any constituent.
- F. Monitoring Reports [40 CFR § 122.41(I)(4)(ii)].**
1. If a Permittee monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR Part 136, or another method specified in this Order, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the Annual Monitoring Reports.
- G. Monitoring Reports [40 CFR § 122.41(I)(4)(iii)]**
1. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order.
- H. If no flow occurred during the reporting period, then the Monitoring Report shall so state.
- I. The Regional Water Board or its Executive Officer, consistent with 40 CFR section 122.41, may approve changes to the Monitoring and Reporting Program, after providing the opportunity for public comment, either:

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1. By request of a Permittee or by an interested person after submittal of the Monitoring Report. Such request shall be in writing and filed not later than 60 days after the Monitoring Report submittal date, or
 2. As deemed necessary by the Regional Water Board Executive Officer, following notice to the Permittees.
- J.** Permittees must provide a copy of the Standard Operation Procedures (SOPs) for the Monitoring and Reporting Program No. CI XXXX to the Regional Water Board upon request. The SOP will consist of five elements: Title page, Table of Contents, Procedures, Quality Assurance/ Quality Control (QA/ QC), and References. Briefly describe the purpose of the work or process, including any regulatory information or standards that are appropriate to the SOP process, and the scope to indicate what is covered. Denote what sequential procedures should be followed, divided into significant sections; e.g., possible interferences, equipment needed, equipment/instrument maintenance and calibration, personnel qualifications, and safety considerations. Describe QA/ QC activities, and list any cited or significant references.
- K.** When monitoring cannot be performed to comply with the requirements of this Order due to circumstances beyond a Permittee's control, then within two working days, the following shall be submitted to the Regional Water Board Executive Officer:
1. Statement of situation.
 2. Explanation of circumstance(s) with documentation.
 3. Statement of corrective action for the future.
- L.** Results of monitoring from each receiving water or outfall based monitoring station conducted in accordance with the Standard Operating Procedure submitted under Standard Provision 14 of this MRP shall be sent electronically to the Regional Water Board's Storm Water site at MS4stormwaterRB4@waterboards.ca.gov, semi-annually, highlighting exceedances of applicable WQBELs, receiving water limitations, action levels, or aquatic toxicity thresholds to implement TMDL provisions and Basin Plan water quality objectives, including California Toxic Rule continuous maximum concentration (CMC) criteria for all test results, with corresponding sampling dates per receiving water monitoring station. The sample data transmitted shall be in the most recent update of the Southern California Municipal Storm Water Monitoring Coalition's (SMC) Standardized Data Transfer Formats (SDTFs).
- ~~**M.** When monitoring data provides evidence that a storm water or non-storm water discharge has caused or contributed to an exceedance of a WQBEL, a non-storm water action level, or aquatic toxicity, the Permittee shall submit notification to the Regional Water Board electronically on a semi-annual basis.~~

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XV. ANNUAL REPORT SUBMITTAL TIMELINES

- A. Each Permittee or group of Permittees shall submit by December 15th of each year beginning in 2013, an Annual Report to the Regional Water Board Executive Officer in the form of ~~a one hard copy and~~ three compact disks (CD) (or equivalent electronic format).

XVI. ANNUAL REPORTING REQUIREMENT OBJECTIVES

- A. The annual reporting process is intended to meet the following objectives.
1. Present summary information that allows the Regional Water Board to assess:
 - a. Each Permittee's participation in one or more Watershed Management Programs.
 - b. The impact of each Permittee(s) storm water and non-storm water discharges on the receiving water.
 - c. Each Permittee's compliance with receiving water limitations, numeric water quality-based effluent limitations, and non-storm water action levels.
 - d. The effectiveness of each Permittee(s) control measures in reducing discharges of pollutants from the MS4 to receiving waters.
 - e. Whether the quality of MS4 discharges and the health of receiving waters is improving, staying the same, or declining as a result watershed management program efforts, and/or TMDL implementation measures, or other Minimum Control Measures.
 - f. Whether changes in water quality can be attributed to pollutant controls imposed on new development, re-development, or retrofit projects.
 2. Present detailed data and information in an accessible format to allow the Regional Water Board to verify conclusions presented in a Permittee's summary information.
 3. Provide the Permittee(s) a forum to discuss the effectiveness of its past and ongoing control measure efforts and to convey its plans for future control measures.
 4. Present data and conclusions in a transparent manner so as to allow review and understanding by the general public.
 5. Focus each Permittee's reporting efforts on watershed condition, water quality assessment, and an evaluation of the effectiveness of control measures.

XVII. WATERSHED SUMMARY INFORMATION, ORGANIZATION AND CONTENT

- B. Each Permittee shall include the information requested in A.1 through A.3 below in its odd year Annual Report (e.g., Year 1, 3, 5). The requested information shall be provided for each watershed within the Permittee's jurisdiction. Alternatively, permittees participating in a Watershed Management Program may

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provide the requested information through the development and submission of a Watershed Management Program plan and any updates thereto.

1. **Watershed Management Area.** Where a Permittee has individually or collaboratively developed a Watershed Management Program Plan (WMPP) as described in Part VI.C of this Order, reference to the Watershed Management Program plan and any revisions thereto may suffice for baseline information regarding the Watershed Management Area.
 - a. The following information shall be included for each Watershed Management Area within the Permittee(s) jurisdiction, where not included in a WMPP:
 - i. A description of effective TMDLs, applicable WQBELs and receiving water limitations, and implementation and reporting requirements, and compliance dates
 - ii. CWA section 303(d) listings of impaired waters not addressed by TMDLs
 - iii. Results of regional bioassessment monitoring
 - iv. A description of known hydromodifications to receiving waters and a description, including locations, of natural drainage systems
 - v. Description of groundwater recharge areas including number and acres
 - vi. Maps and/or aerial photographs identifying the location of ESAs, ASBS, natural drainage systems, and groundwater recharge areas
2. **Subwatershed (HUC-12) Description.** The following information shall be included for each Subwatershed (HUC-12) within the Permittee(s) jurisdiction. Where a Permittee has individually or collaboratively developed a WMPP as described in Part VI.C of this Order, reference to the WMPP and any revisions thereto may suffice for baseline information regarding the subwatershed (HUC-12) descriptions, where the required information is already included in the WMPP. The summary information describing the subwatershed shall include the following information:
 - a. Description including HUC-12 number, name and a list of all tributaries named in the Basin Plan
 - b. Land Use map of the HUC-12 subwatershed
 - c. 85th percentile, 24-hour rainfall isohyetal map for the subwatershed
 - d. One-year, one-hour storm intensity isohyetal map for the subwatershed
 - e. MS4 map for the subwatershed, including major MS4 outfalls and all low-flow diversions
3. **Description of the Permittee(s) Drainage Area within the Subwatershed.** Where a Permittee has individually or collaboratively developed a WMPP as described in Part VI.C of this Order, reference to the WMPP and any

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revisions thereto may suffice for baseline information regarding the Permittee’s Drainage Area within the subwatershed (HUC-12), where the required information is already included in the Watershed Management Program. The following information shall be included for each jurisdiction within the Subwatershed (HUC-12):

- a. A subwatershed map depicting the Permittee(s) jurisdictional area and the MS4, including major outfalls (with identification numbers), and low flow diversions (with identifying names or numbers) located, within the Permittee’s jurisdiction.
- b. Provide the estimated baseline percent of effective impervious area (EIA) within the Permittee(s) jurisdictional area as existed at the time that this Order became effective.

XVIII. ANNUAL ASSESSMENT AND REPORTING

- A. Each Permittee or group of Watershed Permittees shall include the information requested in A.1 through A.7 below in its Annual Report. The requested information shall be provided for each watershed within the Permittee’s jurisdiction. Each Permittee shall format its Annual Report to align with the reporting requirements identified in Parts A.1 through A.7 below.

Annual Reports submitted on behalf of a group of Watershed Permittees shall clearly identify all data collected and strategies, control measures, and assessments implemented by each Permittee within its jurisdiction as well as those implemented by multiple Permittees on a watershed scale.

- 1. **Storm Water Control Measures.** Each Permittee shall make all reasonable efforts to determine, compile, analyze, and summarize the following information.
 - a. Estimated cumulative change in percent EIA since the effective date of this Order and, if possible, the estimated change in the storm water runoff volume during the 85th percentile storm event.
 - b. Summary of New Development/Re-development Projects constructed within the Permittee(s) jurisdictional area during the reporting year.
 - c. Summary of Retrofit Projects that reduced or disconnected impervious area from the MS4 during the reporting year.
 - d. Summary of other projects designed to intercept storm water runoff prior to discharge to the MS4 during the reporting year.
 - e. For the projects summarized above in 1.b through 1.d, estimate the total runoff volume retained on site by the implemented projects.
 - f. Summary of actions taken in compliance with TMDL implementation plans or approved Watershed Management Programs to implement TMDL provisions in Part VI.E and Attachments L-R of this Order.

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- g. Summary of riparian buffer/wetland restoration projects completed during the reporting year. For riparian buffers include width, length and vegetation type; for wetland include acres restored, enhanced or created.
- h. Summary of other Minimum Control Measures implemented during the reporting year, as the Permittee deems relevant.
- i. Status of all multi-year efforts that were not completed in the current year and will therefore continue into the subsequent year(s). Additionally, if any of the requested information cannot be obtained, the Permittee shall provide a discussion of the factor(s) limiting its acquisition and steps that will be taken to improve future data collection efforts.

2. Effectiveness Assessment of Storm Water Control Measures

- a. Rainfall summary for the reporting year. Summarize the number of storm events, highest volume event (inches/24 hours), highest number of consecutive days with measureable rainfall, total rainfall during the reporting year compared to average annual rainfall for the subwatershed. Precipitation data ~~shall~~may be obtained from Los Angeles County Department of Public Works rain gauge stations available at <http://www.ladpw.org/wrd/precip/>.
- b. Provide a summary table describing rainfall during storm water outfall and wet-weather receiving water monitoring events. The summary description shall include the date, time that the storm commenced and the storm duration in hours, the highest 15-minute recorded storm intensity (converted to inches/hour), the total storm volume (inches), and the time between the storm event sampled and the end of the previous storm event.
- c. Where control measures were designed to reduce impervious cover or storm water peak flow and flow duration, provide hydrographs or flow data of pre- and post-control activity for the 85th percentile, 24-hour rain event, if available.
- d. For natural drainage systems, develop a reference watershed flow duration curve and compare it to a flow duration curve for the subwatershed under current conditions.
- e. Provide an assessment as to whether the quality of storm water discharges as measured at designed outfalls is improving, staying the same or declining. The Permittee may compare water quality data from the reporting year to previous years with similar rainfall patterns, conduct trends analysis, or use other means to develop and support its conclusions (e.g., use of non-storm water action levels or municipal action levels as provided in Attachment G of this Order).
- f. Provide an assessment as to whether wet-weather receiving water quality within the jurisdiction of the Permittee is improving, staying the same or declining, when normalized for variations in rainfall patterns. The

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Permittee may compare water quality data from the reporting year to previous years with similar rainfall patterns, conduct trends analysis, draw from regional bioassessment studies, or use other means to develop and support its conclusions.

- g. Status of all multi-year efforts, including TMDL implementation, that were not completed in the current year and will continue into the subsequent year(s). Additionally, if any of the requested information cannot be obtained, the Permittee shall provide a discussion of the factor(s) limiting its acquisition and steps that will be taken to improve future data collection efforts.

3. Non-Storm Water Control Measures

- a. Estimate the number of major outfalls within the Permittee's jurisdiction in the subwatershed.
- b. Provide the number of outfalls that were screened for significant non-storm water discharges during the reporting year.
- c. Provide the cumulative number of outfalls that have been screened for significant non-storm water discharges since the date this Order was adopted through the reporting year.
- d. Provide the number of outfalls with confirmed significant non-storm water discharge.
- e. Provide the number of outfalls where significant non-storm water discharge was attributed to other NPDES permitted discharges; other authorized non-storm water discharges; or conditionally exempt discharges pursuant to Part III.A of this Order.
- f. Provide the number of outfalls where significant non-storm water discharges were abated as a result of the Permittee's actions.
- g. Provide the number of outfalls where non-storm water discharges was monitored.
- h. Provide the status of all multi-year efforts, including TMDL implementation, that were not completed in the current year and will continue into the subsequent year(s). Additionally, if any of the requested information cannot be obtained, the Permittee shall provide a discussion of the factor(s) limiting its acquisition and steps that will be taken to improve future data collection efforts.

4. Effectiveness Assessment of Non-Storm Water Control Measures

- a. Provide an assessment as to whether receiving water quality within the jurisdiction of the Permittee is impaired, improving, staying the same or declining during dry-weather conditions. Each Permittee may compare water quality data from the reporting year to previous years with similar dry-weather flows, conduct trends analysis, draw from regional

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bioassessment studies, or use other means to develop and support its conclusions.

- b. Provide an assessment of the effectiveness of the Permittee(s) control measures in effectively prohibiting non-storm water discharges through the MS4 to the receiving water.
- c. Provide the status of all multi-year efforts that were not completed in the current year and will continue into the subsequent year(s).

5. Integrated Monitoring Compliance Report

- a. Provide an Integrated Monitoring Report that summarizes all identified exceedances of (1) outfall-based storm water monitoring data, (2) wet weather receiving water monitoring data, (3) dry weather receiving water data, and (4) non-storm water outfall monitoring data against all applicable receiving water limitations, water quality-based effluent limitations, non-storm water action levels, and aquatic toxicity thresholds as defined in Sections XII.F and G of this MRP. All sample results that exceeded one or more applicable thresholds shall be readily identified.
- b. If aquatic toxicity was confirmed and a TIE was conducted, identify the toxic chemicals as determined by the TIE. Include all relevant data to allow the Regional Water Board to review the adequacy and findings of the TIE. This shall include, but not be limited to, the sample(s) date, sample(s) start and end time, sample type(s) (flow-weighted composite, grab, or field measurement), sample location(s) as depicted on the map, the parameters, the analytical results, and the applicable limitation.
- c. Provide a description of efforts that were taken to mitigate and/or eliminate all non-storm water discharges that exceeded one or more applicable water quality based effluent limitations, non-storm water action levels, or caused or contributed to Aquatic Toxicity.
- d. Provide a description of efforts that were taken to address storm water discharges that exceeded one or more applicable water quality based effluent limitations, or caused or contributed to Aquatic Toxicity.
- e. Where Receiving Water Limitations were exceeded, provide a description of efforts that were taken to determine whether discharges from the MS4 caused or contributed to the exceedances and all efforts that were taken to control the discharge of pollutants from the MS4 to those receiving waters in response to the exceedances.

6. Adaptive Management Strategies

- a. Identify the most effective control measures and describe why the measures were effective and how other control measures will be optimized based on past experiences.
- b. Identify the least effective control measures and describe why the measures were deemed ineffective and how the control measures will be modified or terminated.

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- c. Identify significant changes to control measures during the prior year and the rationale for the changes.
- d. Describe all significant changes to control measures anticipated to be made in the next year and the rationale for the changes. Those changes requiring approval of the Regional Water Board or its Executive Officer shall be clearly identified at the beginning of the Annual Report.
- e. Include a detailed description of control measures to be applied to New Development or Re-development projects disturbing more than 50 acres.
- f. Provide the status of all multi-year efforts that were not completed in the current year and will continue into the subsequent year(s).

7. Supporting Data and Information

- a. All monitoring data and associated meta data used to prepare the Annual Report shall be summarized in an Excel spreadsheet and sorted by watershed, subwatershed and monitoring station/outfall identifier linked to the subwatershed map. The data summary must include the date, sample type (flow-weighted composite, grab, field measurement), sample start and stop times, parameter, analytical method, value, and units. The date field must be linked to a database summarizing the weather data for the sampling date including 24-hour rainfall, rainfall intensity, and days since the previous rain event.
- b. Optional. The Permittee may at its option, provide an additional detailed summary table describing control measures that are not otherwise described in the reporting requirements.

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XIX. TMDL REPORTING

Permittees shall report on the progress of TMDL implementation per the schedules identified below in Sections A – G.

A. Reporting Requirements for Santa Clara River WMA TMDLs

Deliverable	Description	Due Date(s)
Santa Clara River Nitrogen Compounds TMDL		
Work Plan	Permittees shall submit a Work Plan to estimate ammonia and nitrogen loadings from the MS4 for approval by the Regional Water Board Executive Officer. The Work Plan must include monitoring for ammonia, nitrate, and nitrite. The Work Plan may include a phased approach wherein the first phase is based on monitoring from the existing mass emission station in the Santa Clara River. The Work Plan must also contain a protocol and a schedule for implementing additional monitoring if necessary. The Work Plan must also propose triggers for conducting source identification and implementing BMPs, if necessary.	Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP, or If a WMP or IMP or CIMP will not be developed then submitted the Work Plan 12 months after the effective date of this Order.
Progress Reports	Annual progress reports on the Implementation Plan must be submitted to the Regional Water Board.	December 15, 2013, and annually thereafter
Upper Santa Clara River Chloride TMDL		
Monitoring Results	Permittees shall conduct chloride, TDS, and sulfate monitoring to ensure that water quality objectives are being met.	December 15, 2013, and annually thereafter
Lake Elizabeth, Munz Lake, and Lake Hughes Trash		
Progress Reports	Report compliance with the installation of full capture systems.	December 15, 2013, and annually thereafter
Santa Clara River Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL		
Receiving Water Monitoring Plan and Outfall Monitoring Plan	Permittees must submit a comprehensive in-stream bacteria water quality monitoring plan for the Santa Clara River Watershed. The monitoring plan should include all applicable bacteria water quality objectives and the sampling frequency must be adequate to assess compliance with the geometric mean objectives. At a minimum, at least one sampling station shall be located in each impaired reach. The outfall monitoring plan shall propose an adequate number of representative outfalls to be sampled, a sampling frequency, and protocol for enhanced outfall monitoring as a result of an in-stream exceedance. The Monitoring Plans must be approved by the Regional Water Board Executive Officer before the monitoring data can be considered during the implementation of the TMDL. Once the monitoring plan is approved by the Executive Officer, monitoring shall commence within 30 days.	March 21, 2013, or Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP.

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Draft Implementation Plan	Permittees must submit a draft Implementation Plan outlining how each intends to cooperatively or individually achieve compliance with the water quality-based effluent limitations and the receiving water limitations. The Implementation Plan shall include implementation methods, an implementation schedule and proposed milestones.	March 21, 2015
Final Implementation Plan	Permittees must submit a final Implementation Plan.	Six months after receipt of Regional Water Board comments on the draft Implementation Plan.
Board Briefing	Permittees shall provide a verbal update to the Regional Water Board on the progress of TMDL implementation.	March 21, 2017

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B. Reporting Requirements for Santa Monica Bay WMA TMDLs

Deliverable	Description	Due Date(s)
Santa Monica Bay Beaches Bacteria TMDL		
Monitoring Results	Monthly data summary reports shall be submitted to the Regional Water Board by the last day of each month for data collected during the previous month. Two agencies will submit the monthly reports on behalf of all Permittees: City of Los Angeles, Department of Public Works, Bureau of Sanitation, Environmental Monitoring Division (on behalf of Jurisdictional Groups 1 through 6, 8, and 9); and Los Angeles County Sanitation Districts (on behalf of Jurisdictional Group 7).	Monthly on the last day of the month.
Santa Monica Bay Nearshore and Offshore Debris TMDL		
Trash Monitoring and Reporting Plan (TMRP)	Permittees shall develop a Trash Monitoring and Reporting Plan (TMRP) for Regional Water Board Executive Officer approval that describes the methodologies that will be used to assess and monitor trash in their responsible areas within the Santa Monica Bay WMA or along Santa Monica Bay. The TMRP shall include a plan to establish a site specific trash baseline water quality-based effluent limitation if Permittees elect to not use the default baseline effluent limitation. Requirements for the TMRP shall include, but are not limited to, assessment and quantification of trash collected from source areas in the Santa Monica Bay WMA, and shoreline of the Santa Monica Bay. The monitoring plan shall provide details on the frequency, location, and reporting format. Permittees shall propose a metric (e.g., weight, volume, pieces of trash) to measure the amount of trash discharged from their jurisdictional areas.	Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP, or If a WMP or IMP or CIMP will not be developed then submitted the TMRP 12 months after the effective date of this Order.
Implement TMRP	Implement TMRP	If TMRP is submitted by September 20, 2012, then implement the TMRP 6 months from receipt of letter of approval from Regional Water Board Executive Officer, or the date a plan is established by the Executive Officer; or If an IMP or CIMP is submitted, then monitoring shall commence within 30 days after approval of the IMP or CIMP plan by the Executive Officer.
Plastic Pellets Monitoring and Reporting Plan	Permittees identified as responsible jurisdictions and agencies for point sources of trash in the Santa Monica Bay Debris TMDL and in the existing Malibu Creek and Ballona Creek Trash TMDLs, including the Los Angeles County Flood Control District, shall either prepare a Plastic	September 20, 2013, or Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP.

	<p>Pellet Monitoring and Reporting Plan (PMRP) or demonstrate that a PMRP is not required.</p> <p>The PMRP shall include protocols for a timely and appropriate response to possible plastic pellets spills within a Permittees' jurisdictional area, and a comprehensive plan to ensure that plastic pellets are contained.</p>	
Implement PMRP	Implement PMRP	March 20, 2016
Submit results of implementing TMRP and PMRP	Submit results of implementing TMRP and PMRP, recommend trash baseline water quality-based effluent limitations, and propose prioritization of Full Capture System installation or implementation of other measures to attain the required trash and plastic pellet reduction.	December 15, 2013, and annually thereafter
Santa Monica Bay TMDL for DDTs and PCBs (USEPA established)		
Monitoring and Reporting Plan	Permittees shall develop a Monitoring and Reporting Plan for Regional Water Board Executive Officer approval that describes the methodologies that will be used to monitor and assess sediment for DDT and PCBs. The monitoring design and assessment framework should be designed to provide credible estimates of the total mass loadings to the Santa Monica Bay. Monitoring should be conducted on a coordinated watershed-wide basis using sufficiently sensitive analytical methods for DDT and PCBs. Monitoring sediments in catch basins designed for pollutant prevention may be a way for Permittees to quantify load reductions to the Santa Monica Bay.	<p>Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP, or</p> <p>If a WMP or IMP or CIMP will not be developed then submitted the Monitoring and Reporting Plan 12 months after the effective date of this Order.</p>
Malibu Creek and Lagoon Bacteria TMDL		
Monitoring Results	Monthly data summary reports shall be submitted to the Regional Water Board by the last day of each month for data collected during the previous month.	Monthly on the last day of the month.
Malibu Creek Watershed Trash TMDL		
Submit results of TMRP	Submit results of Trash Monitoring and Reporting Plan (TMRP), recommend trash baseline water quality-based effluent limitations, and propose prioritization of Full Capture System installation or implementation of other measures to attain the required trash.	December 15, 2013, and annually thereafter
Malibu Creek Watershed Nutrients TMDL (USEPA established)		
Monitoring and Reporting Plan	Permittees shall develop a Monitoring and Reporting Plan for Regional Water Board Executive Officer approval that demonstrates compliance with the water quality-based effluent limitations for total nitrogen and total phosphorus.	<p>Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP, or</p> <p>If a WMP or IMP or CIMP will not be developed then submitted the Monitoring and Reporting Plan 12 months after the effective date of this Order.</p>
Ballona Creek Trash TMDL		

Annual Progress Reports	Report compliance with the required percent reduction of trash discharged to Ballona Creek.	December 15, 2013, and annually thereafter.
Ballona Creek Estuary Toxic Pollutants TMDL		
Annual Monitoring Report	Permittees shall submit annual monitoring reports, which include compliance summary tables, to the Regional Water Board.	December 15, 2013, and annually thereafter.
Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL		
Monitoring Results	Monthly data summary reports shall be submitted to the Regional Water Board by the last day of each month for data collected during the previous month.	Monthly on the last day of the month.
Ballona Creek Metals TMDL		
Annual Monitoring Report	Permittees shall submit annual monitoring reports, which include compliance summary tables, to the Regional Water Board.	December 15, 2013, and annually thereafter.
Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation (USEPA established)		
Monitoring and Reporting Plan	Permittees shall develop a Sediment Monitoring and Reporting Plan for Regional Water Board Executive Officer approval to quantify the annual loading of sediment from the Ballona Creek Watershed and the impact of the sediment loading into the Ballona Creek Wetlands.	Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP, or If a WMP or IMP or CIMP will not be developed then submitted the Monitoring and Reporting Plan 12 months after the effective date of this Order.
Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL		
Monitoring Results	Monthly data summary reports shall be submitted to the Regional Water Board by the last day of each month for data collected during the previous month.	Monthly on the last day of the month.
Marina del Rey Harbor Toxic Pollutants TMDL		
Annual Monitoring Report	Permittees shall submit annual monitoring reports, which include compliance summary tables, to the Regional Water Board.	December 15, 2013, and annually thereafter.

C. Reporting Requirements for Dominguez Channel and Greater Harbors Waters WMA TMDLs

Deliverable	Description	Due Date(s)
Los Angeles Harbor Bacteria TMDL		
Monitoring Results	Monthly data summary reports shall be submitted to the Regional Water Board by the last day of each month for data collected during the previous month.	Monthly on the last day of the month.
Machado Lake Trash TMDL		
Progress Reports	Report compliance with the required percent reduction of trash discharged to Machado Lake.	December 15, 2013, and annually thereafter.
Machado Lake Nutrient TMDL		
Annual Monitoring Report	The Cities of Palos Verdes Estates, Ranch Palos Verdes, Rolling Hills and Rolling Hills Estates shall submit annual monitoring reports that demonstrate compliance with the concentration-based water quality-based effluent limitations.	December 15, 2013, and annually thereafter.
Annual Monitoring Report	The City of Los Angeles shall submit annual monitoring reports that demonstrate compliance with the Lake Water Quality Management Plan and reduces the external nutrient loading to attain the receiving water limitations for Machado Lake.	December 15, 2013, and annually thereafter.
Annual Monitoring Report	The City of Carson shall submit annual monitoring reports that demonstrate compliance with the concentration-based water quality-based effluent limitations.	December 15, 2013, and annually thereafter.
Annual Monitoring Report	The County of Los Angeles shall submit annual monitoring reports that demonstrate compliance with the mass-based water quality-based effluent limitations.	December 15, 2013, and annually thereafter.
Annual Monitoring Report	The City of Torrance shall submit annual monitoring reports that demonstrate compliance with the mass-based water quality-based effluent limitations.	December 15, 2013, and annually thereafter.
Annual Monitoring Report	The Cities of Lomita and Redondo Beach shall submit annual monitoring reports that demonstrate compliance with the concentration-based water quality-based effluent limitations.	December 15, 2013, and annually thereafter.
Machado Lake Pesticides and PCBs TMDL		
Monitoring and Reporting Plan and Quality Assurance Project Plan	Permittees shall develop a Monitoring and Reporting Plan (MRP) and Quality Assurance Project Plan (QAPP) for Regional Water Board Executive Officer approval. The MRP shall demonstrate compliance and non-compliance with the water quality-based effluent limitations as part of reports submitted to the Regional Water Board. The QAPP shall include protocols for sample collection, standard analytical procedures, and	The deadline for Permittees assigned both WLAs and LAs to submit one document to address both the WLA and LA monitoring requirements and implementation activities shall be September 20, 2013.

	laboratory certification. All samples shall be collected in accordance with applicable SWAMP protocols.	Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP, or If a WMP or IMP or CIMP will not be developed then submitted the work plan 12 months after the effective date of this Order.
Begin Phase 1 Monitoring	Begin Phase 1 Monitoring as outlined in the approved MRP and QAPP.	30 days from date of Executive Officer approval of MRP and QAPP
Phase 1 Monitoring	Conduct Phase 1 Monitoring for 2 years.	2 year monitoring period
Draft Implementation Plan	Based on the results of Phase 1 Monitoring, Permittees shall submit an Implementation Plan to attain water quality-based effluent limitations or document that water quality-based effluent limitations are attained.	6 months from completion of Phase 1 Monitoring
Final Implementation Plan	Permittees shall submit Final Implementation Plan.	1 year from completion of Phase 1 Monitoring
Implementation	Permittees shall begin implementation actions to attain water quality-based effluent limitation, as necessary.	30 days from date of Implementation Plan approval
Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL		
Monitoring and Reporting Plan and Quality Assurance Project Plan	Permittees shall develop Monitoring and Reporting Plans (MRPs) and Quality Assurance Project Plans (QAPPs) for Regional Water Board Executive Officer approval in accordance with the TMDL. The MRPs shall include a requirement that the responsible parties report compliance and non-compliance with water quality-based effluent limitations as part of annual reports submitted to the Regional Water Board. The QAPPs shall include protocols for sample collection, standard analytical procedures, and laboratory certification. All samples shall be collected in accordance with applicable SWAMP protocols.	November 23, 2013, or Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP.
Monitoring Plan	Permittees shall implement monitoring as outlined in the approved MRP and QAPP.	30 days after MRP and QAPP is approved by Regional Water Board Executive Officer.
Annual Monitoring Reports	Permittees shall submit annual monitoring reports to the Regional Water Board.	December 15, 2013, and annually thereafter.
Implementation Plan and Contaminated Sediment Management Plan (CSMP)	Permittees in the Dominguez Channel and Greater Harbors Waters Watershed Management Area shall develop and submit an Implementation Plan and Contaminated Sediment Management Plan (CSMP). The CSMP shall include concrete milestones with numeric estimates of load reductions or removal, including milestones for remediating hot spots, including but not limited to Dominguez Channel Estuary, Consolidated Slip and Fish Harbor, for Regional Water Board Executive Officer approval.	Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP, or If a WMP or IMP or CIMP will not be developed then submitted the Implementation Plan and CSMP 12 months after the effective date of this Order.
Report of Implementation	Permittees in the Los Angeles River and San Gabriel River Watersheds shall submit a Report of Implementation to the Regional Water Board.	December 15, 2013, and annually thereafter
Implementation Reports	Permittees shall submit annual implementation reports to the Regional	December 15, 2014, and annually thereafter

	Water Board. Report on implementation progress and demonstrate progress toward meeting the water quality-based effluent limitations.	
Updated Implementation Plan and CSMP	Permittees in the Dominguez Channel and Greater Harbors Waters Watershed Management Area shall submit an updated Implementation Plan and Contaminated Sediment Management Plan (CSMP).	March 23, 2017

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D. Reporting Requirements for the Los Angeles River WMA TMDLs

Deliverable	Description	Due Date(s)
Los Angeles River Watershed Trash TMDL		
Reporting	Report compliance with the installation of full capture systems.	December 15, 2013, and annually thereafter.
Los Angeles River Nitrogen Compounds and Related Effects TMDL		
Monitoring Work Plan	Submittal of a Monitoring Work Plan by MS4 Permittees to estimate nitrogen loadings associated with runoff loads from the storm drain system for approval by the Executive Officer of the Regional Water Board. The Work Plan will include monitoring for ammonia, nitrate, and nitrite. The Work Plan may include a phased approach wherein the first phase is based on monitoring from the existing mass emission station in the Los Angeles River. The Work Plan will also contain protocol and a schedule for implementing additional monitoring if necessary. The Work Plan will also propose triggers for conducting source identification and implementing BMPs, if necessary.	Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP, or If a WMP or IMP or CIMP will not be developed then submitted the Monitoring Work Plan 12 months after the effective date of this Order.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Los Angeles River and Tributaries Metals TMDL		
Annual Monitoring Report	Permittees shall submit annual monitoring reports as detailed in the approved coordinated monitoring plan to the Regional Water Board.	December 15, 2013, and annually thereafter.
Los Angeles River Watershed Bacteria TMDL		
Bacteria Coordinated Monitoring Plan	<p>Permittees shall submit a Bacteria Coordinated Monitoring Plan (CMP), which shall be submitted for Regional Water Board Executive Officer approval. The CMP shall detail: the number and location of sites, including at least one monitoring station per each river segment, reach and tributary addressed under this TMDL; measurements and sample collection methods; and monitoring frequencies. Permittees may also include in the CMP, for Executive Officer consideration, other meteorological stations which may be more representative of the existing hydrology and climate.</p> <p>Each segment, reach, and tributary addressed under this TMDL shall be monitored at least monthly until the subject segment, reach or tributary is at the end of the execution part of its first implementation phase (i.e. 7 years after beginning the segment or tributary-specific phase), to determine compliance with the interim water quality based effluent limitations. Each segment, reach and tributary addressed under this TMDL shall be monitored at least weekly to determine compliance with the instream targets after the first implementation phase.</p>	<p>March 23, 2013, or</p> <p>Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP.</p>

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	<p>For parties pursuing a Load Reduction Strategy (LRS), intensive outfall monitoring will be conducted before and after implementation of the LRS. Pre-LRS monitoring will be used to estimate the <i>E. coli</i> loading from MS4 outfalls to the segment or tributary, and identify the outfalls and types of implementation actions that are expected to be necessary to attain the water quality based limits. Post-LRS monitoring will be used to evaluate compliance with the interim water quality based limits and to plan for additional implementation actions to meet the final water quality based limits, in a second implementation phase, if necessary.</p> <p>When applicable, outfall monitoring shall including <i>E. coli</i> by USEPA- approved methods and flow rate at <i>all</i> MS4 outfalls (“snapshots”) that are discharging to a segment or tributary or across jurisdictional boundaries during a given monitoring event. For each LRS, at least six (6) snapshots shall be conducted for pre-LRS monitoring, and at least three (3) snapshots shall be conducted for post- LRS monitoring. For MS4s that choose to follow a non-LRS implementation approach, but choose to demonstrate compliance with Equivalent Conditions, at least six (6) snapshots shall be conducted.</p>	
Implement CMP	Permittees shall begin implementation actions to attain water quality-based effluent limitation, as necessary.	30 days after approval of the CMP
Annual Monitoring Report	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Implementation Plan	Permittees shall submit an Implementation Plan for wet weather with interim milestones for approval of the Regional Water Board Executive Officer.	March 23, 2022
Legg Lake Trash TMDL		
TMRP Reports MFAC	Report compliance with the approved MFAC program.	December 15, 2013, and annually thereafter
Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL		
Compliance Monitoring	<p>To evaluate compliance with numeric targets, monitoring shall take place at existing monitoring sites as well as any new monitoring locations in the ambient water. For beach monitoring locations, daily or systematic weekly sampling in the wave wash at all major drains and creeks, existing monitoring stations at beaches without storm drains, and freshwater outlets is recommended to evaluate compliance. At all beach locations, samples should be taken at ankle depth and on an incoming wave, consistent with section 7961(b) of title 17 of the California Code of Regulations. At locations where there is a freshwater outlet, during wet weather, samples should be taken as close as possible to the wave wash, and no further away than 10 meters down current of the storm drain or outlet.</p> <p>A robust monitoring program shall be developed for the LAR Estuary. Available data</p>	<p>Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP, or</p> <p>If a WMP or IMP or CIMP will not be developed then submitted the Monitoring Plan 12 months after the effective date of this Order.</p>

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	includes bi-weekly monitoring from May through September of 2009, and 2010. Monitoring shall be expanded to include year round monitoring requirements, and at least three monitoring locations within the Estuary. We understand that adequate data to establish a reference estuary approach is currently not available. If in the future, adequate data from reference estuary studies become available, it may be appropriate to consider a reference estuary approach to evaluate compliance with these TMDLs.	
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Annual Monitoring Report	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Los Angeles Area Lakes TMDLs		
Lake Calabasas Nutrient TMDL		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids, total dissolved solids and chlorophyll a. Measurements of the temperature, DO, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement. All parameters must meet target levels at half the Secchi depth. DO and pH must meet target levels from the surface of the water to 0.3 meters above the lake bottom. Additionally, in order to accurately calculate compliance with water quality based limits to the lake expressed in yearly loads, monitoring should include flow estimation or monitoring as well as the water quality concentration measurements.	At a minimum twice during summer months and once during winter.
Supplemental Water Monitoring	At Lake Calabasas, water quality based limits are assigned to supplemental water additions. This source should be monitoring for at minimum; ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and total dissolved solids.	Once a year during the summer months (critical conditions).
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes for at minimum: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and total dissolved solids.	Twice a year.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Echo Park Lake Nutrient TMDL		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids, total dissolved	At a minimum twice during summer months and once during winter.

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	solids and chlorophyll a. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement. All parameters must meet target levels at half the Secchi depth. DO and pH must meet target levels from the surface of the water to 0.3 meters above the lake bottom. Additionally, in order to accurately calculate compliance with water quality based limits to the lake expressed in yearly loads, monitoring should include flow estimation or monitoring as well as the water quality concentration measurements.	
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes for at minimum: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and total dissolved solids.	Twice a year.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Echo Park Lake PCBs and Organochlorine Pesticide TMDLs		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: total suspended sediments, total PCBs, total chlordane, and dieldrin; as well as the following in-lake sediment parameters: total organic carbon, total PCBs, total chlordane, and dieldrin. Environmentally relevant detection limits should be used (i.e., detection limits lower than applicable target), if available at a commercial laboratory. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement.	December 15, 2013, and annually thereafter.
Fish Tissue Monitoring	Monitoring of fish tissue. For the OC pesticides and PCBs TMDLs, a demonstration that fish tissue targets have been met in any given year must at minimum include a composite sample of skin off fillets from at least five largemouth bass each measuring at least 350mm in length.	At least every three years.
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes. Sampling should be designed to collect sufficient volumes of suspended solids to allow for the analysis of at minimum: total organic carbon, total suspended solids, total PCBs, total chlordane, and dieldrin. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken.	Once a year during a wet weather event.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Echo Park Lake Trash TMDL		
Compliance Monitoring	Responsible jurisdictions should monitor the trash quantity deposited in the vicinity of Echo Park Lake as well as on the waterbody to comply with the	Quarterly.

	TMDL target and to understand the effectiveness of various implementation efforts. The Rapid Trash Assessment Method is recommended.	
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Legg Lake System Nutrient TMDL		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids, total dissolved solids and chlorophyll <i>a</i> . Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement. All parameters must meet target levels at half the Secchi depth. DO and pH must meet target levels from the surface of the water to 0.3 meters above the lake bottom. Additionally, in order to accurately calculate compliance with water quality based limits to the lake expressed in yearly loads, monitoring should include flow estimation or monitoring as well as the water quality concentration measurements.	At a minimum twice during summer months and once during winter.
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes for at minimum: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and total dissolved solids.	Twice a year.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Peck Road Park Lake Nutrient TMDL		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids, total dissolved solids and chlorophyll <i>a</i> . Measurements of the temperature, DO, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement. All parameters must meet target levels at half the Secchi depth. Deep lakes, such as Peck Road Park Lake, must meet the DO and pH targets in the water column from the surface to 0.3 meters above the bottom of the lake when the lake is not stratified. However, when stratification occurs (i.e., a thermocline is present) then the DO and pH targets must be met in the epilimnion, the portion of the water column above the thermocline. Additionally, in order to accurately calculate compliance with water quality based limits to the lake expressed in yearly loads, monitoring should include flow estimation or monitoring as well as the water quality concentration measurements.	At a minimum twice during summer months and once during winter.
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the	Twice a year.

	lakes for at minimum: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and total dissolved solids.	
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Peck Road Park Lake PCBs and Organochlorine Pesticide TMDLs		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: total suspended sediments, total PCBs, total chlordane, total DDTs, and dieldrin; as well as the following in-lake sediment parameters: total organic carbon, total PCBs, total chlordane, total DDTs, and dieldrin. Environmentally relevant detection limits should be used (i.e., detection limits lower than applicable target), if available at a commercial laboratory. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement.	December 15, 2013, and annually thereafter.
Fish Tissue Monitoring	Monitoring of fish tissue. For the OC pesticides and PCBs TMDLs, a demonstration that fish tissue targets have been met in any given year must at minimum include a composite sample of skin off fillets from at least five common carp each measuring at least 350mm in length.	At least every three years.
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes. Sampling should be designed to collect sufficient volumes of suspended solids to allow for the analysis of at minimum: total organic carbon, total suspended solids, total PCBs, total chlordane, total DDTs, and dieldrin. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken.	Once a year during a wet weather event.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Peck Road Park Lake Trash TMDL		
Compliance Monitoring	Responsible jurisdictions should monitor the trash quantity deposited in the vicinity of Peck Road Park Lake as well as in the waterbody to comply with the TMDL target and to understand the effectiveness of various implementation efforts. The Rapid Trash Assessment Method is recommended.	Quarterly.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.

E. Reporting Requirements for San Gabriel River WMA TMDLs

Deliverable	Description	Due Date(s)
San Gabriel River and Impaired Tributaries Metals and Selenium TMDL		
Coordinated Monitoring Plan	<p>Permittees shall develop a Coordinated Monitoring Plan, to be approved by the Regional Water Board Executive Officer, which includes both TMDL effectiveness monitoring and ambient monitoring. The ambient monitoring program shall contain monitoring in all reaches and major tributaries of the San Gabriel River, including but not limited to additional dry- and wet-weather monitoring in the San Gabriel River Reaches 4 and 5 and Walnut Creek, additional dry-weather monitoring in San Gabriel River Reach 2, and additional wet-weather monitoring in San Jose Creek, San Gabriel River Reaches 1 and 3, and the Estuary. Sediment samples shall be collected semi-annually in the Estuary and analyzed for sediment toxicity resulting from copper, lead, selenium, and zinc.</p> <p>The TMDL effectiveness monitoring shall demonstrate the effectiveness of the phased implementation schedule for reducing pollutant loads to achieve the dry- and wet-weather water quality based effluent limitations. Monitoring stations specified for the ambient monitoring program may be used for the TMDL effectiveness monitoring. The final dry-weather monitoring stations shall be located in San Jose Creek Reach 1 and the Estuary. The final wet-weather TMDL effectiveness monitoring stations may be located at the existing Los Angeles County Department of Public Works mass emission sites in San Gabriel River Reach 2 and Coyote Creek.</p> <p>Permittees shall sample once per month, during dry-weather conditions, at each proposed TMDL effectiveness monitoring location. Permittees shall sample at least 4 wet-weather events where flow meets wet-weather conditions (260 cfs in San Gabriel River Reach 2 and 156 cfs in Coyote Creek) in a given storm season (November to March), unless there are fewer than 4 wet-weather events, at each proposed TMDL effectiveness monitoring location. Permittees are encouraged to coordinate with the San Gabriel watershed-wide monitoring program to avoid duplication and leverage resources.</p>	<p>Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP, or</p> <p>If a WMP or IMP or CIMP will not be developed then submitted the Coordinated Monitoring Plan 12 months after the effective date of this Order.</p>

Annual Monitoring Report	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Implementation Plan	Permittees shall submit an Implementation Plan outlining how to achieve compliance with the water quality based effluent limitations, for approval of the Regional Water Board Executive Officer. The Plan shall include implementation methods, an	1 year after the effective date of this Order

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	implementation schedule, and proposed milestones.	
Los Angeles Area Lakes TMDLs		
Puddingstone Reservoir Nutrient TMDL		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids, total dissolved solids and chlorophyll a. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement. All parameters must meet target levels at half the Secchi depth. DO and pH must meet target levels from the surface of the water to 0.3 meters above the lake bottom when the lake is not stratified. However, when stratification occurs (i.e., a thermocline is present) then the DO and pH targets must be met in the epilimnion, the portion of the water column above the thermocline. Additionally, in order to accurately calculate compliance with water quality based limits to the lake expressed in yearly loads, monitoring should include flow estimation or monitoring as well as the water quality concentration measurements.	At a minimum twice during summer months and once during winter.
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes for at minimum: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and total dissolved solids.	Twice a year.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Puddingstone Reservoir Mercury TMDL		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: total mercury, methylmercury, chloride, sulfate, total organic carbon, alkalinity, total suspended solids, and total dissolved solids; as well as the following in-lake sediment parameters: total mercury, dissolved methylmercury, total organic carbon, total solids and sulfate. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement. Additionally, in order to accurately calculate compliance with allocations expressed in yearly loads, monitoring should include flow estimation or monitoring as well as water quality concentration measurements.	Twice a year.
Fish Tissue Monitoring	Monitoring should include monitoring of largemouth bass (325-375mm in length) fish tissue (skin-off fillets) for mercury concentration.	At least every three years.
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes for at minimum: total mercury, methyl mercury, chloride, sulfate, total organic carbon, alkalinity, total suspended solids, and total dissolved solids.	Twice a year.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Puddingstone Reservoir PCBs and Organochlorine Pesticide TMDLs		

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Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: total suspended sediments, total PCBs, total chlordane, dieldrin, and total DDTs; as well as the following in-lake sediment parameters: total organic carbon, total PCBs, total chlordane, dieldrin, and total DDTs. Environmentally relevant detection limits should be used (i.e., detection limits lower than applicable target), if available at a commercial laboratory. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement.	Annually.
Fish Tissue Monitoring	Monitoring of fish tissue. For the OC pesticides and PCBs TMDLs a demonstration that fish tissue targets have been met in any given year must at minimum include a composite sample of skin off fillets from at least five common carp each measuring at least 350mm in length.	At least every three years.
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes. Sampling should be designed to collect sufficient volumes of suspended solids to allow for the analysis of at minimum: total organic carbon, total suspended solids, total PCBs, total chlordane, dieldrin, and total DDTs. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken.	Once a year during a wet weather event.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.

F. Reporting Requirements for Los Cerritos Channel WMA TMDLs

Deliverable	Description	Due Date(s)
Los Cerritos Channel Metals TMDL		
Coordinated Monitoring Plan	<p>Permittees shall develop a Coordinated Monitoring Plan, to be approved by the Regional Water Board Executive Officer, which includes both TMDL effectiveness monitoring and ambient monitoring. The ambient monitoring program shall be developed to track trends in water quality improvements in Los Cerritos Channel; to provide background information on hardness values; and the partitioning of metals between the total recoverable and dissolved fraction.</p> <p>TMDL effectiveness monitoring shall demonstrate the effectiveness of the phased implementation schedule for reducing pollutant loads to achieve the water quality based effluent limitations. Monitoring stations specified for the ambient monitoring program may be used for the TMDL effectiveness monitoring. Permittees shall sample at least 4 wet-weather events where flow meets wet-weather conditions (>23 cfs in Los Cerritos Channel above the tidal prism) in a given storm season.</p>	<p>Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP, or</p> <p>If a WMP or IMP or CIMP will not be developed then submitted the Coordinated Monitoring Plan 12 months after the effective date of this Order.</p>
Annual Monitoring Report	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Implementation Plan	Permittees shall submit an Implementation Plan outlining how to achieve compliance with the water quality based effluent limitations, for approval of the Regional Water Board Executive Officer. The Plan shall include implementation methods, an implementation schedule, and proposed milestones.	1 year after the effective date of this Order
Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL		
Monitoring	Water column and sediment samples will be collected at the outlet of the storm drains discharging to the lagoon, while water column, sediment, and fish tissue samples will be collected in the West Arm, Central Arm, North Arm, at the outlet of the lagoon to Marine Stadium during an incoming tide, and at the outfall of Termino Avenue Drain to Marine Stadium as specified in the Colorado Lagoon TMDL Monitoring Plan (CLTMP).	February 1, 2013
Annual Monitoring Reports	Permittees shall submit annual monitoring reports to the Regional Water Board. All compliance monitoring must be conducted in conjunction with a Regional Water Board approved Quality Assurance Project Plan.	December 15, 2013, and annually thereafter.
Implementation Progress	Permittees shall submit annual progress reports on the status of implementation actions performed under the TMDL. The plan shall contain mechanisms for demonstration progress toward meeting the water quality based effluent limitations.	December 15, 2013, and annually thereafter.

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G. Reporting Requirements for Middle Santa Ana River WMA TMDL

Deliverable	Description	Due Date(s)
Middle Santa Ana River Watershed Bacteria Indicator TMDL		
Bacterial Indicator Water Quality Monitoring Plan	Permittees shall develop and submit for approval by the Executive Officer of the Regional Water Board a Bacterial Indicator Water Quality Monitoring Plan in accordance with the TMDL.	Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP, or If a WMP or IMP or CIMP will not be developed then submitted the Monitoring Plan 12 months after the effective date of this Order.
Bacterial Indicator Urban Source Evaluation Plan	Permittees shall develop and submit for approval by the Regional Water Board a Bacterial Indicator Urban Source Evaluation Plan. This plan shall include steps needed to identify specific activities, operations, and processes in urban areas that contribute bacterial indicators to San Antonio Channel. The plan shall also include a proposed schedule for completion of each of the steps identified.	1 year after the effective date of this Order
Progress Reports	Annual progress reports on implementation shall be submitted to the Regional Water Board.	December 15, 2013, and annually thereafter.

Greater Los Angeles County
Municipal Separate Storm Sewer System

ORDER NO. R4-2012-XXXX
NPDES NO. CAS004001

I, Samuel Unger, Executive Officer, do hereby certify that this Monitoring and Reporting Program is a full, true, and correct copy of the MRP adopted by the California Regional Water Quality Control Board, Los Angeles Region, on <Adoption Date>.

Samuel Unger, P.E.
Executive Officer

Date: _____ 2012

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ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

As described in Part II of this Order, this Fact Sheet sets forth the significant factual, legal, methodological, and policy rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for dischargers in California.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility and the Dischargers.

Table F-1. Facility and Discharger Information

WDID	Various (See Table 4 of Order)
Dischargers	The Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the coastal watersheds of Los Angeles County with the exception of the City of Long Beach (See Table 4 of Order)
Name of Facility	Municipal Separate Storm Sewer Systems (MS4s) within the Coastal Watersheds of Los Angeles County with the exception of the City of Long Beach MS4
Facility Address	Various
Facility Contact, Title and Phone	Various (See Table 4 of Order)
Mailing Address	Various (See Table 4 of Order)
Billing Address	Same as above
Type of Facility	Large Municipal Separate Storm Sewer System (MS4) ¹
Major or Minor Facility	Major

¹ According to 40 CFR § 122.26(b)(8), “[a] municipal separate storm sewer system (MS4) means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;
- (ii) Designed or used for collecting or conveying storm water;
- (iii) Which is not a combined sewer; and
- (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.”

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Watersheds	(1) Santa Clara River Watershed; (2) Santa Monica Bay Watershed Management Area, including Malibu Creek Watershed and Ballona Creek Watershed; (3) Los Angeles River Watershed; (4) Dominguez Channel and Greater Los Angeles/Long Beach Harbors Watershed Management Area; (5) Los Cerritos Channel and Alamitos Bay Watershed Management Area;(6) San Gabriel River Watershed; and (7) Santa Ana River Watershed
Receiving Water	Surface waters identified in Tables 2-1, 2-1a, 2-3, and 2-4, and Appendix 1, Table 1 of the Water Quality Control Plan - Los Angeles Region (Basin Plan), and other unidentified tributaries to these surface waters within the following Watershed Management Areas: (1) Santa Clara River Watershed; (2) Santa Monica Bay Watershed Management Area, including Malibu Creek Watershed and Ballona Creek Watershed; (3) Los Angeles River Watershed; (4) Dominguez Channel and Greater Los Angeles/Long Beach Harbors Watershed Management Area; (5) Los Cerritos Channel and Alamitos Bay Watershed Management Area; (6) San Gabriel River Watershed; and (7) Santa Ana River Watershed ² .
Receiving Water Type	Inland surface waters, estuarine waters, and marine waters, including wetlands, lakes, rivers, estuaries, lagoons, harbors, bays, and beaches

The Los Angeles County Flood Control District, Los Angeles County, and the 84 municipalities listed in Table F-2 above are the owners and/or operators³ of Municipal Separate Storm Sewer Systems within the Coastal Watersheds of Los Angeles County (hereinafter Facility).

For the purposes of this Order, the entities listed in Table 4 of the Order are hereinafter referred to separately as “Permittees” and jointly as the “Dischargers.” References to “discharger” or “permittee” or “co-permittee” or “municipality” in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Dischargers or Permittees herein.

II. FACILITY DESCRIPTION

A. Description of the Permittees’ MS4s

The Permittees’ MS4s, like many MS4s in the nation, are based on regional floodwater management systems that use both natural and altered water bodies to achieve flood

² Note that the Santa Ana River Watershed lies primarily within the boundaries of the Santa Ana Regional Water Quality Control Board. However, a portion of the Chino Basin subwatershed lies within the jurisdictions of Pomona and Claremont in Los Angeles County. The primary receiving water within the Los Angeles County portion of the Chino Basin subwatershed are San Antonio Creek and Chino Creek.

³ Owner or operator means the owner or operator of any facility or activity subject to regulation under the NPDES program (40 CFR § 122.2).

management goals. The Permittees' MS4s comprise a large interconnected system, controlled in large part by the Los Angeles County Flood Control District (LACFCD), among others, and used by multiple cities along with Los Angeles County. This extensive system conveys storm water and non-storm water across municipal boundaries where it is commingled within the MS4 and then discharged ~~to receiving~~to receiving water bodies.

In 1915, the California Legislature enacted the Los Angeles County Flood Control Act, establishing the Los Angeles County Flood Control District (LACFCD). The objects and purposes of the Act are to provide for the control and conservation of the flood, storm and other waste waters within the flood control district. Among its other powers, the LACFCD also has the power to preserve, enhance, and add recreational features to lands or interests in lands contiguous to its properties for the protection, preservation, and use of the scenic beauty and natural environment for the properties or the lands. The LACFCD is governed, as a separate entity, by the County of Los Angeles Board of Supervisors.

The area covered under this Order encompasses more than 3,000 square miles. This area contains a vast drainage network that serves incorporated and unincorporated areas in every Watershed Management Area within the Los Angeles Region. Maps depicting the major drainage infrastructure within the area covered under this Order are included in Attachment C of this Order.

The total length of the Permittees' MS4s, and the locations of all storm drain connections, are not known exactly, as a comprehensive map for the MS4 does not exist. Rough estimates, based on information from the LACFCD and large municipalities (population > 100,000), indicate that the length exceeds 4,300 miles, as shown below. The LACFCD's system includes the majority of drainage infrastructure within incorporated and unincorporated areas in every watershed, including approximately 500 miles of open channel, 3,500 miles of underground drains, and an estimated ~~88,800-000~~ catch basins, and several dams. Portions of the LACFCD's current system were originally unmodified natural rivers and water courses.

Table F-2. Extent of Select Permittees' MS4s

Permittee	Area (Square Miles)	Catch Basins	Storm Drain Length	Open Channel Length
LACFCD/ LA County	3,100	88,000	3,500 miles	500 miles
City of LA	469	30,000	1,600 miles	31 miles
El Monte	10	316	11 miles	0.4 mile

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Permittee	Area (Square Miles)	Catch Basins	Storm Drain Length	Open Channel Length
Glendale	30.6	1,100	Unknown	Unknown
Inglewood	9	1,157	12 miles	Unknown
Pasadena	26	1,050	30	Unknown
Santa Monica	8.3	850	Unknown	Unknown
Torrance	20	2,000	20 miles	3 miles
TOTAL		approx. 109,473	approx. 4,323	approx. 484.4

Unlike other Permittees, the LACFCD does not own or operate any municipal sanitary sewer systems, public streets, roads, or highways, and has no planning, zoning, development permitting or other land use authority over industrial or commercial facilities, new developments or re-development projects, or development construction sites located in any incorporated or unincorporated areas within its service area. Nonetheless, as an owner and operator of MS4s, the LACFCD is required by federal regulations to control pollutant discharges into and from its MS4, including the ability to control through interagency agreements among co-permittees and other owners of a MS4 the contribution of pollutants from one portion of the MS4 to another portion of the MS4. However, tAdditionally, the Los Angeles County Flood Control District does owns the County of Los Angeles Department of Public Works headquarters building and Los Angeles County Flood Control District maintenance yards to support its field operations.

Storm water and non-storm water are conveyed through the MS4s and ultimately discharged into receiving waters of the Los Angeles Region. MS4s subject to this Order receive storm water and non-storm water flows from various sources. These flows come from MS4s owned by the Permittees covered by this Order and other public agencies, NPDES permitted discharges, discharges authorized by the USEPA (including discharges subject to a decision document approved pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)), groundwater, and natural flows.

The requirements contained in this Order apply to the Los Angeles County Flood Control District, 84 cities within the coastal watersheds of Los Angeles County, and the unincorporated areas of Los Angeles County under County jurisdiction, with the exception of the City of Long Beach. Under the previous Order, Order No. 01-182, the Los Angeles County Flood Control District was designated the Principal Permittee, and the County of Los Angeles and the 84 incorporated cities were designated co-Permittees. However, in this Order, the role of Principal Permittee has been eliminated. This Order divides Los Angeles County into seven Watershed Management Areas (WMAs).

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B. The Need to Regulate Discharges from MS4s

The quality of storm water and non-storm water discharges from MS4s is fundamentally important to the health of the environment and the quality of life in Southern California. Polluted storm water and non-storm water discharges from MS4s are a leading cause of water quality impairment in the Los Angeles Region. Storm water and non-storm water discharges are often contaminated with pesticides, fertilizers, fecal indicator bacteria and associated pathogens, trash, automotive byproducts, and many other toxic substances generated by activities in the urban environment. Water that flows over streets, parking lots, construction sites, and industrial, commercial, residential, and municipal areas carries these untreated pollutants through the MS4 directly into the receiving waters of the Region. The water quality impacts, ecosystem impacts, and increased public health risks from MS4 discharges that affect receiving waters nationwide and throughout Los Angeles County, including its coastline, are well documented.

The National Urban Runoff Program (NURP) Study (USEPA 1983) showed that MS4 discharges draining from residential, commercial, and light industrial areas contain significant loadings of total suspended solids and other pollutants. Many studies continue to support the conclusions of the NURP Study. The NURP Study also found that pollutant levels from illicit discharges were high enough to significantly degrade receiving water quality, and threaten aquatic life, wildlife, and human health. The general findings and conclusions of the NURP Study are reiterated in the more recent 2008 National Research Council report "Urban Runoff Management in the United States" as well as in a regional study, "Sources, Patterns and Mechanisms of storm Water Pollutant Loading from Watersheds and Land Uses of the Greater Los Angeles Area, California," SCCWRP Technical Report 510 (2007), funded in large part by the Regional Water Board.

Some of the conclusions of the 2007 regional study were as follows.

Storm water runoff from watershed and land use based sources is a significant contributor of pollutant loading and often exceeds water quality standards. High pollutant concentrations were observed throughout the study at both mass emission (ME) and land use (LU) sites. Pollutant concentrations frequently exceeded water quality standards.

Storm water Event Mean Concentrations (EMCs), fluxes and loads were substantially lower from undeveloped open space areas when compared to developed urbanized watersheds. Storms sampled from less developed watersheds produced pollutant EMCs and fluxes that were one to two orders of magnitude lower than comparably sized storms in urbanized watersheds. Furthermore, the higher fluxes from developed watersheds were generated by substantially less rainfall than the lower fluxes from the undeveloped watersheds, presumably due to increased impervious surface area in developed watersheds.

The Los Angeles region contributed a similar range of storm water runoff pollutant loads as that of other regions of the United States. Comparison of constituent concentrations

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in storm water runoff from land use sites from this study reveal median EMCs that are comparable to U.S. averages reported in the National Storm water Quality Database (NSQD; Pitt et al., 2003). Comparison to the NSQD data set provides insight to spatial and temporal patterns in constituent concentrations in urban systems. Similarities between levels reported in the NSQD and this study suggest that land-based concentrations in southern California storm water are generally comparable to those in other parts of the country.

Peak concentrations for all constituents were observed during the early part of the storm. Constituent concentrations varied with time over the course of storm events. For all storms sampled, the highest constituent concentrations occurred during the early phases of storm water runoff with peak concentrations usually preceding peak flow. Although the pattern of an early peak in concentration was comparable in both large and small developed watersheds, the peak concentration tended to occur later in the storm and persist for a longer duration in the smaller developed watersheds. Therefore monitoring programs must capture the early portion of storms and account for intra-storm variability in concentration in order to generate accurate estimates of EMC and contaminant loading. Programs that do not initiate sampling until a flow threshold has been surpassed may severely underestimate storm EMCs.

Highest constituent loading was observed early in the storm season with intra-annual variability driven more by antecedent dry period than amount of rainfall. Seasonal differences in constituent EMCs and loads were consistently observed at both ME and LU sites. In general, early season storms (October – December) produce significantly higher constituent EMCs and loads than late season storms (April-May), even when rainfall quantity was similar. This suggests that the magnitude of constituent load associated with storm water runoff depends, at least in part, on the amount of time available for pollutant build-up on land surfaces. The extended dry period that typically occurs in arid climates such as southern California maximizes the time for constituents to build-up on land surfaces, resulting in proportionally higher concentrations and loads during initial storms of the season.

The 1992, 1994, and 1996 National Water Quality Inventory Reports to Congress prepared by USEPA showed a trend of impairment in the Nation's waters from contaminated storm water and dry weather urban runoff. The 2004 National Water Quality Inventory (305(b) Report) showed that urban runoff/storm water discharges contribute to the impairment of 22,559 miles of streams, the impairment of 701,024 acres of lakes, and the impairment of 867 square miles of estuaries in the United States. The Natural Resources Defense Council (NRDC) 1999 Report, "Stormwater Strategies, Community Responses to Runoff Pollution" identifies two main causes of the storm water pollution problem in urban areas. Both causes are directly related to development in urban and urbanizing areas:

Increased volume and velocity of surface runoff. There are three types of human-made impervious covers that increase the volume and velocity of runoff: (i) rooftop, (ii) transportation imperviousness, and (iii) non-porous (impervious) surfaces. As these impervious surfaces increase, infiltration will decrease, forcing more water to run off the surface, picking up speed and pollutants.

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The concentration of pollutants in the runoff. Certain activities, such as those from industrial sites, are large contributors of pollutant concentrations to the MS4.

The report also identified several activities causing storm water pollution from urban areas, including practices of homeowners, businesses, and government agencies.

Studies conducted by the United States Geological Survey (USGS) confirm the link between urbanization and water quality impairments in urban watersheds due to contaminated storm water runoff.

Furthermore, the water quality impacts of urbanization and urban storm water discharges have been summarized by several other recent USEPA reports. Urbanization causes changes in hydrology and increases pollutant loads which adversely impact water quality and impair the beneficial uses of receiving waters. Increases in population density and imperviousness result in changes to stream hydrology including:

- increased peak discharges compared to predevelopment levels;
- increased volume of storm water runoff with each storm compared to pre-development levels;
- decreased travel time to reach receiving water;
- increased frequency and severity of floods;
- reduced stream flow during prolonged periods of dry weather due to reduced levels of infiltration;
- increased runoff velocity during storms due to a combination of effects of higher discharge peaks, rapid time of concentration, and smoother hydraulic surfaces from channelization; and
- decreased infiltration and diminished groundwater recharge.

The Los Angeles County MS4 program has conducted monitoring to:

- quantify mass emissions for pollutants;
- identify critical sources for pollutants of concern in storm water;
- evaluate BMP effectiveness; and
- evaluate receiving water impacts, including impacts to tributaries.

The monitoring indicates that instream concentrations of pathogen indicators (fecal coliform and streptococcus), heavy metals (such as Pb, Cu, Zn) and pesticides (such as diazinon) exceed water quality standards. The mass emissions of pollutants to the ocean are significant from the urban WMAs such as the Los Angeles River WMA, Ballona Creek WMA, and Coyote Creek WMA, with the Los Angeles River WMA providing more than seventy percent of the loadings. Critical source data for facilities (such as auto-salvage yards, primary metal facilities, and automotive repair shops) show that total and dissolved heavy metals (Pb, Cu, Zn, and Cd), and total suspended solids (TSS) exceeded water quality standards by as much as two orders of magnitude. The results are consistent with a limited term study conducted by the Regional Water Board to characterize storm water runoff in the Los Angeles region in 1988 before the issuance of first MS4 permit. Storm water runoff data from predominant land uses in

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Los Angeles County showed similar patterns. Light industrial, commercial and transportation land uses showed the highest range of exceedances. A pesticide (diazinon) was detected in higher concentrations from residential land use. The data for polycyclic aromatic hydrocarbons (PAHs), a known pollutant of concern in urban storm water runoff, is inconclusive but improved analytical methods may yield more definitive results in the future. Receiving water impacts studies found that storm water discharges from urban watersheds exhibit toxicity attributable to heavy metals. Bioassessments of the benthic communities showed bioaccumulation of toxicants. Sediment analysis showed higher concentrations of pollutants, such as Pb and PAHs, in urban watersheds than in rural watersheds (2 to 4 times higher). In addition, toxicity of dry weather flows was observed with the cause of toxicity undetermined. Other studies have documented concentrations of pollutants that exceed water quality standards in storm drains flowing to the ocean during dry weather, and adverse health impacts from swimming near flowing storm drains.

Trash is also a serious and pervasive water quality problem in Los Angeles County. The Regional Water Board has determined that current levels of trash exceed the existing water quality objectives contained in the Basin Plan that are necessary to protect the beneficial uses of many surface waters. Regional Water Board staff regularly observes trash in surface waters throughout the Los Angeles region. Non-profit organizations such as Heal the Bay, Friends of the Los Angeles River (FoLAR) and others organize volunteer clean-ups periodically, and document the amount of trash collected. Trash in waterways causes significant water quality problems. Small and large floatables inhibit the growth of aquatic vegetation, decreasing habitat and spawning areas for fish and other living organisms. Wildlife living in rivers and in riparian areas can be harmed by ingesting or becoming entangled in floating trash. Except for large items, settleables are not always obvious to the eye. They include glass, cigarette butts, rubber, and construction debris, among other things. Settleables can be a problem for bottom feeders and can contribute to sediment contamination. Some debris (e.g. diapers, medical and household waste, and chemicals) are a source of bacteria and toxic substances. Floating debris that is not trapped and removed will eventually end up on the beaches or in the open ocean, keeping visitors away from our beaches and degrading coastal waters. Significant strides have been made by a number of Permittees in addressing this problem through the implementation of control measures to achieve wasteload allocations established in trash TMDLs.

C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data

The Los Angeles County MS4 Permit was last reissued in 2001 as Order No.01-182. Order No. 01-182 expired in 2006, but has been administratively extended pursuant to federal regulations. Order No. 01-182 was reopened by the Regional Water Board in 2006, 2007 and 2009 to incorporate provisions to implement three TMDLs. It was further amended in 2010 and 2011 pursuant to a peremptory writ of mandate issued by the Los Angeles County Superior Court.

Order No. 01-182 is organized under the following seven parts and includes several attachments. The description below summarizes key permit parts and attachments in Order No. 01-182:

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Part 1 – Discharge Prohibitions

As required by section 402(p)(3)(B)(ii) of the Clean Water Act, Part 1 requires permittees to “effectively prohibit non-storm water discharges into the MS4 and watercourses, except where such discharges” are covered by a separate NPDES permit or fall within one of thirteen categories of flows that are conditionally exempted from the discharge prohibition. These exempted flows fall under the general categories of natural flows, fire fighting flows, and flows incidental to urban activities (i.e. landscape irrigation, sidewalk rinsing). These non-storm water flows may be exempted so long as: (i) they are not a source of pollutants, (ii) their effective prohibition is not necessary to comply with TMDL provisions, and (iii) they do not violate antidegradation policies. Part 1 also authorizes the Regional Water Board Executive Officer to impose conditions on these types of discharges and to add or remove categories of conditionally exempted non-storm water discharges based on their potential to contribute pollutants to receiving waters.

Part 2 – Receiving Water Limitations

Part 2 prohibits discharges from the MS4 that cause or contribute to the violation of water quality standards. In addition, discharges from the MS4 of storm water or non-storm water, for which a Permittee is responsible, may not cause or contribute to a condition of nuisance. Part 2.3 states that permittees shall comply with these prohibitions “through timely implementation of control measures and other actions to reduce pollutants in the discharges in accordance with [the Los Angeles Stormwater Quality Management Program (SQMP)] and its components and other requirements of [the LA County MS4 Permit].” Part 2.3 establishes an “iterative process” whereby certain actions are required when exceedances of water quality standards or objectives occur. This iterative process includes submitting a Receiving Water Limitations Compliance Report; revising the SQMP and its components to include modified BMPs, an implementation schedule and additional monitoring to address the exceedances; and implementing the revised SQMP. These provisions are consistent with the receiving water limitations language required by State Water Board Order WQ 99-05.

Part 2 also includes provisions implementing the Marina del Rey Harbor Mothers’ Beach and Back Basins Bacteria TMDL (summer dry weather provisions only). During summer dry weather, Part 2.6 prohibits discharges of bacteria from MS4s into Marina del Rey Harbor Basins D, E, or F, including Mothers’ Beach that cause or contribute to exceedance of the applicable bacteria water quality objectives.

Part 2 also included similar TMDL provisions relating to the Santa Monica Bay summer dry weather bacteria TMDL. However, as a result of a legal challenge by Los Angeles County and the LACFCD, the Regional Water Board was required to void and set aside those provisions, which the Regional Water Board did in 2011.

Part 3 – Stormwater Quality Management Program (SQMP) Implementation

Under Part 3, each Permittee shall, at a minimum, implement the SQMP, which is an enforceable element of the Los Angeles County MS4 Permit. The SQMP, at a minimum, shall also comply with the applicable storm water program requirements of 40 CFR

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section 122.26(d)(2). The SQMP and its components shall be implemented so as to reduce the discharges of pollutants in storm water to the maximum extent practicable (MEP) and effectively prohibit non-storm water discharges to the MS4. Each Permittee shall also implement additional controls, where necessary, to reduce the discharge of pollutants from the MS4.

Part 3 also sets forth specific responsibilities of the Principal Permittee, which under Order No. 01-182 is the LACFCD, and co-permittees. In addition, Part 3 sets forth requirements for Watershed Management Committees (WMCs) which, among other tasks, prioritize pollution control efforts and evaluate the effectiveness of and recommend changes to the SQMP and its components. Each Permittee must also have the necessary legal authority to prohibit non-storm water discharges to the MS4, as well as possess adequate legal authority to develop and enforce storm water and non-storm water ordinances for its jurisdiction.

Part 4 – Special Provisions

Part 4 sets forth provisions for public information and participation, industrial/commercial facilities control program, development planning, development construction, public agency activities, and illicit connections and illicit discharges elimination. These programs are termed “minimum control measures” and have been in place since the inception of the MS4 NPDES permitting program, as required by federal regulations.

Part 5 – Definitions

Part 5 includes definitions for terms used within Order No. 01-182.

Part 6 – Standard Provisions

Part 6 includes standard provisions relating to implementation of the programs required by the permit. Such provisions include, but are not limited to, the duty to comply, the duty to mitigate, inspection and entry requirements, proper operation and maintenance requirements, monitoring and reporting requirements, and the duty to provide information. Most of these provisions are required by 40 CFR sections 122.41 or 122.42 and apply to all NPDES permits.

Part 7 – TMDL Provisions

In 2009, Order No. 01-182 was amended to include provisions that are consistent with the assumptions and requirements of waste load allocations from the Los Angeles River Trash TMDL. Appendix 7-1 identifies the permittees subject to the Los Angeles River Trash TMDL and sets forth the interim and final numeric effluent limitations for trash that the permittees must comply with. Part 7 also sets forth how permittees can demonstrate compliance with the numeric effluent limitations. Permittees have the option to employ three general compliance strategies to achieve the numeric effluent limitations. Depending on the strategy selected, the Permittee may demonstrate compliance either by documenting the percentage of its area addressed by full capture systems (“action-based” demonstration) or by calculating its annual trash discharge to the MS4 and comparing that to its effluent limitation. This approach allows the Permittee the flexibility to comply with the numeric effluent limitations using any lawful means, and establishes appropriate and enforceable compliance metrics depending on the method of

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compliance and level of assurance provided by the Permittee that the selected method will achieve the numeric effluent limitations derived from the TMDL WLAs.

Attachment U – Monitoring and Reporting Program

Order No. 01-182 has both self-monitoring and public reporting requirements, which include: (1) monitoring of “mass emissions” at seven mass emission monitoring stations; (2) Water Column Toxicity Monitoring; (3) Tributary Monitoring; (4) Shoreline Monitoring; (5) Trash Monitoring; (6) Estuary Sampling; (7) Bioassessment; and (8) Special Studies. The purpose of mass emissions monitoring is to: (1) estimate the mass emissions from the MS4; (2) assess trends in the mass emissions over time; and (3) determine if the MS4 is contributing to exceedances of water quality standards by comparing results to the applicable standards in the Basin Plan. Order No. 01-182 established that the Principal Permittee shall monitor the mass emissions stations. The permit required mass emission sampling five times per year.

III. APPLICABLE STATUTES, REGULATIONS, PLANS, AND POLICIES

The provisions contained in this Order are based on the requirements and authorities described below.

A. Legal Authorities – Federal Clean Water Act and California Water Code

This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It serves as an NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260).

B. Federal and California Endangered Species Acts

This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code, §§ 2050 to 2115.5) or the Federal Endangered Species Act (16 U.S.C.A., §§ 1531 to 1544). This Order requires compliance with requirements to protect the beneficial uses of waters of the United States. Permittees are responsible for meeting all requirements of the applicable Endangered Species Act.

C. California Environmental Quality Act (CEQA)

This action to adopt an NPDES Permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA) (Public Resources Code, § 21100, et seq.) pursuant to California Water Code section 13389. (*County of Los Angeles v. Cal. Water Boards* (2006) 143 Cal.App.4th 985.)

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D. State and Federal Regulations, Policies, and Plans

1. Water Quality Control Plans. The CWA requires the Regional Water Board to establish water quality standards for each water body in its region. Water quality standards include beneficial uses, water quality objectives and criteria that are established at levels sufficient to protect those beneficial uses, and an antidegradation policy to prevent degrading waters. On June 13, 1994, the Regional Water Board adopted a *Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (hereinafter Basin Plan). The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters in the Los Angeles Region. The Regional Water Board has amended the Basin Plan on multiple occasions since 1994. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to the surface water bodies that receive discharges from the Los Angeles County MS4 generally include those listed below:

Table F-3. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
All Municipal Separate Storm Sewer Systems (MS4s) discharge points within <u>the coastal watersheds of Los Angeles County</u> with the exception of <u>those originating in</u> the City of Long Beach	Multiple surface water bodies of the Los Angeles Region	Municipal and Domestic Supply (MUN); Agricultural Supply (AGR); Industrial Service Supply (IND); Industrial Process Supply (PROC); Ground Water Recharge (GWR); Freshwater Replenishment (FRSH); Navigation (NAV); Hydropower Generation (POW); Water Contact Recreation (REC-1); Limited Contact Recreation (LREC-1); Non-Contact Water Recreation (REC-2); Commercial and Sport Fishing (COMM); Warm Freshwater Habitat (WARM); Cold Freshwater Habitat (COLD); Preservation of Areas of Special Biological Significance (BIOL); Wildlife Habitat (WILD); Preservation of Rare and Endangered Species (RARE); Marine Habitat (MAR); Wetland Habitat (WET); Migration of Aquatic Organisms (MIGR); Spawning, Reproduction, and/or Early Development (SPWN); Shellfish Harvesting (SHELL)

Pursuant to California Water Code sections 13263(a) and 13377, the requirements of this Order implement the Basin Plan.

a. Permit Structure: Watershed Management Approach and Total Maximum Daily Load (TMDL) Implementation

One of the fundamental issues for this Order was a reconsideration of the basic permit structure. The previous Order, Order No. 01-182, was structured as a single permit whereby all 86 Permittees were assigned uniform requirements, with additional requirements for the Principal Permittee. Through Order No. 01-

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182, the Regional Water Board began to implement a Watershed Management Approach to address water quality protection in the region. The Watershed Management Approach intended to provide a comprehensive and integrated strategy toward water resource protection, enhancement, and restoration while considering economic and environmental impacts within a hydrologically defined drainage basin or watershed.

On June 12, 2006, prior to the expiration date of Order No. 01-182, all of the Permittees filed Reports of Waste Discharge (ROWD) applying for renewal of their waste discharge requirements. Specifically, the Los Angeles County Flood Control District submitted an ROWD application on behalf of itself, the County of Los Angeles, and 78 other Permittees. Several Permittees under Order No. 01-182 elected to not be included as part of the Los Angeles County Flood Control District's ROWD. On June 12, 2006, the cities of Downey and Signal Hill each submitted an individual ROWD application requesting an individual MS4 permit; and the Upper San Gabriel River Watershed Coalition (comprised of the cities of Azusa, Claremont, Glendora, Irwindale, and Whittier) also submitted an individual ROWD application requesting a separate MS4 permit for these cities. In 2010, the LACFCD withdrew from its 2006 ROWD and submitted a new ROWD also requesting an individual MS4 permit. The LACFCD also requested that it no longer be designated as the Principal Permittee and that it is relieved of Principal Permittee responsibilities.

The Regional Water Board evaluated each of the 2006 ROWDs and notified all of the Permittees that their ROWDs did not satisfy federal storm water regulations contained in the USEPA Interpretive Policy Memorandum on Reapplication Requirements for Municipal Separate Storm Sewer Systems; Final Rule, August 9, 1996 (61 *Fed Reg.* 41697). The Regional Water Board also found that the information presented in the ROWDs did not reflect the current status of program elements for MS4 permits developed over the past decade or the new information specific to this MS4. Because each ROWD did not satisfy federal requirements, the Regional Water Board deemed all four 2006 ROWDs incomplete. The Regional Water Board also evaluated the LACFCD's 2010 ROWD and found that it too did not satisfy federal requirements nor reflect the current status for MS4s.

Though five separate ROWDs were submitted, the Regional Water Board retains the discretion as the permitting authority to determine whether to issue permits for discharges from MS4s on a system-wide or jurisdiction-wide basis. Clean Water Act section 402(p)(3)(B)(i) and implementing regulations at 40 CFR section 122.26, subdivisions (a)(1)(v), (a)(3)(ii), and (a)(3)(iv) allow the permitting authority to issue permits for MS4 discharges on a system-wide or jurisdiction-wide basis taking into consideration a variety of factors. Such factors include the location of the discharge with respect to waters of the United States, the size of the discharge, the quantity and nature of the pollutants discharged to waters of the United States, and other relevant factors. Federal regulations at 40 CFR section 122.26(a)(3)(ii) identify a variety of possible permitting structures, including one system-wide permit covering all MS4 discharges or distinct permits

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for appropriate categories of MS4 discharges including, but not limited to, all discharges owned or operated by the same municipality, located within the same jurisdiction, all discharges within a system that discharge to the same watershed, discharges within a MS4 that are similar in nature, or for individual discharges from MS4s.

In evaluating the five separate ROWDs and the structure for this Order, the Regional Water Board considered a number of factors:

- i. The nature of the Permittees' MS4s, which comprise a large interconnected system, controlled in large part by the Los Angeles County Flood Control District, among others, and used by multiple cities along with Los Angeles County. The discharges from these entities frequently commingle in the MS4 prior to discharge to receiving waters.
- ii. The requirement to implement 33 largely watershed-based TMDLs in this Order. A number of Permittees have already established jurisdictional groups on a watershed or subwatershed basis for TMDL implementation. (See Attachment K of this Order for a matrix of these TMDLs and Permittees by Watershed Management Area (WMA)). Many of the TMDLs apply to multiple watersheds and the jurisdictional areas of multiple Permittees. Having separate permits would make implementation of the TMDLs more cumbersome.
- iii. The passage of Assembly Bill 2554 in 2010, which amended the Los Angeles County Flood Control Act. This statute allows the LACFCD to assess a property-related fee or charge for storm water and clean water programs. Funding is subject to voter approval in accordance with Proposition 218. Fifty percent of funding is allocated to nine "watershed authority groups" to implement collaborative water quality improvement plans. (See Attachments B and C of this Order for maps of WMAs.)
- iv. Results of the on-line survey administered to Permittees by Regional Water Board staff regarding permit structure. The results indicated that a majority of Permittees support a single MS4 permit for Los Angeles County. A significant minority support multiple watershed-based permits. Overall, 85 percent of the permittees that responded to the on-line survey support either a single MS4 permit or several individual watershed-based permits. A small number of permittees support alternative groupings of adjacent municipalities instead of watershed-based groupings. Only four permittees expressed a preference for individual MS4 permits.
- v. The 2006 and 2010 ROWDs. Eight Permittees submitted individual or small group ROWDs, including the cities of Signal Hill and Downey; five cities in the upper San Gabriel River watershed; and the Los Angeles County Flood Control District. The LACFCD has also requested that it is no longer designated as Principal Permittee and relieved of Principal Permittee responsibilities.

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Based on an evaluation of these factors, the Regional Water Board again determined that, because of the complexity and networking of the MS4 within Los Angeles County, that one system-wide permit is appropriate. In order to provide individual Permittees with more specific requirements, this Order regulates the MS4 discharges of 86 Permittees with some sections devoted to universal requirements for all Permittees and others devoted to requirements specific to each Watershed Management Area (WMA), including TMDL implementation provisions. This structure is supported by section 402(p) of the Clean Water Act and 40 CFR sections 122.26, subdivisions (a)(1)(v), (a)(3)(ii), and (a)(3)(iv). A single permit will ensure consistency and equitability in regulatory requirements within Los Angeles County, while watershed-based sections within the single permit will provide flexibility to tailor permit provisions to address distinct watershed characteristics and water quality issues. Additionally, an internal watershed-based structure comports with the Regional Water Board's Watershed Management Initiative, its watershed-based TMDL requirements, and the LACFCD's funding initiative passed in Assembly Bill 2554. Watershed-based sections will help promote watershed-wide solutions to address water quality problems, which in many cases are the most efficient and cost-effective means to address storm water and urban runoff pollution. Further, watershed-based sections may encourage collaboration among permittees to implement regional integrated water resources approaches such as storm water capture and re-use to achieve multiple benefits.

The Regional Water Board determined that the cities of Signal Hill and Downey, the five upper San Gabriel River cities, and the LACFCD are included as Permittees in this Order. Individually tailored permittee requirements are provided in this Order, where appropriate.

The Regional Water Board also determined that because the LACFCD owns and operates large portions of the MS4 infrastructure, including but not limited to catch basins, storm drains, outfalls and open channels, in each coastal watershed management area within Los Angeles County, the LACFCD should remain a Permittee in the single-system wide permit; however, this Order relieves LACFCD of its role and responsibilities as Principal Permittee. Additionally, given the LACFCD's limited land use authority, it is appropriate for the LACFCD to have a separate and uniquely-tailored storm water management program. Accordingly, the storm water management program minimum control measures imposed on the LACFCD in Part VI.D of this Order differ in some ways from the minimum control measures imposed on other Permittees. Namely, aside from its own properties and facilities, the LACFCD is not subject to the Industrial/Commercial Facilities Program, the Planning and Land Development Program, and the Development Construction Program. However, as a discharger of storm and non-storm water, the LACFCD remains subject to the Public Information and Participation Program and the Illicit Connections and Illicit Discharges Elimination Program. Further, as the owner and operator of certain properties, facilities and infrastructure, the LACFCD remains subject to requirements of a Public Agency Activities Program. ~~This Order also specifies certain requirements specific to the LACFCD in its role as the owner and~~

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~~operator of large portions of the MS4s within all the coastal watersheds within Los Angeles County.~~

2. **Ocean Plan.** In 1972, the State Water Board adopted the Water Quality Control Plan for Ocean Waters of California, California Ocean Plan (hereinafter Ocean Plan). The State Water Board adopted the most recent amended Ocean Plan on September 15, 2009. The Office of Administration Law approved it on March 10, 2010. On October 8, 2010, USEPA approved the 2009 Ocean Plan. The Ocean Plan is applicable, in its entirety, to ocean waters of the State. In order to protect beneficial uses, the Ocean Plan establishes water quality objectives and a program of implementation. Pursuant to California Water Code sections 13263(a) and 13377, the requirements of this Order implement the Ocean Plan. The Ocean Plan identifies beneficial uses of ocean waters of the State to be protected as summarized below:

Table F-3B. Ocean Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
All Municipal Separate Storm Sewer Systems (MS4s) discharge points within <u>the coastal watersheds of Los Angeles County</u> with the exception of <u>those originating within the City of Long Beach</u>	Pacific Ocean	Industrial Water Supply (IND); Water Contact (REC-1) and Non-Contact Recreation (REC-2), including aesthetic enjoyment; Navigation (NAV); Commercial and Sport Fishing (COMM); Mariculture; Preservation and Enhancement of Designated Areas of Special Biological Significance (ASBS); Rare and Endangered Species (RARE); Marine Habitat (MAR); Fish Migration (MIGR); Fish Spawning (SPWN) and Shellfish Harvesting (SHELL)

3. **Antidegradation Policy.** 40 CFR section 131.12⁴ requires that the state water quality standards include an antidegradation policy consistent with the federal antidegradation policy. The State Water Board established California’s antidegradation policy in State Water Board Resolution No. 68-16 (“Statement of Policy with Respect to Maintaining the Quality of the Waters of the State”). Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. The Regional Water Board’s Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. Resolution No. 68-16 and 40 CFR section 131.12 require the Regional Water Board to maintain high quality waters of the State until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in the Regional Water Board’s policies. Resolution 68-16 requires that discharges of waste be regulated to meet best practicable treatment or control to assure that pollution or nuisance will not

⁴ All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

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occur and the highest water quality consistent with the maximum benefit to the people of the State be maintained.

The discharges permitted in this Order are consistent with the antidegradation provisions of 40 CFR section 131.12 and Resolution 68-16. Many of the water bodies within the area covered by this Order are of high quality. The Order requires the Permittees to meet best practicable treatment or control to meet water quality standards. As required by 40 CFR section 122.44(a), the Permittees must comply with the “maximum extent practicable” technology-based standard set forth in CWA section 402(p). Many of the waters within the area covered by this Order are impaired and listed on the State’s CWA Section 303(d) List and either the Regional Water Board or USEPA has established TMDLs to address the impairments. This Order requires the Permittees to comply with permit provisions to implement the WLAs set forth in the TMDLs in order to restore the beneficial uses of the impaired water bodies consistent with the assumptions and requirements of the TMDLs. This Order includes requirements to develop and implement storm water management programs, achieve water quality-based effluent limitations, and effectively prohibit non-storm water discharges through the MS4.

The issuance of this Order does not authorize an increase in the amount of discharge of waste. The Order includes new requirements to implement WLAs assigned to Los Angeles County MS4 discharges that have been established in 33 TMDLs, most of which were not included in the previous Order.

- 4. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations and other conditions in this Order are at least as stringent as the effluent limitations in the previous permit.

E. Impaired Water Bodies on CWA section 303(d) List

Section 303(d)(1) of the CWA requires each state to identify specific water bodies within its boundaries where water quality standards are not being met or are not expected to be met after implementation of technology-based effluent limitations on point sources. Water bodies that do not meet water quality standards are considered impaired and are placed on the state’s “303(d) List”. Periodically, USEPA approves the State’s 303(d) List. Most recently, USEPA approved the State’s 2010 303(d) List of impaired water bodies on October 11, 2011, which includes certain receiving waters in the Los Angeles region. For each listed water body, the state or USEPA is required to establish a total maximum daily load (TMDL) of each pollutant impairing the water quality standards in that water body. A TMDL is a tool for implementing water quality standards and is based on the relationship between pollution sources and in-stream water quality conditions. The TMDL establishes the allowable pollutant loadings for a water body and thereby provides the basis to establish water quality-based controls. These controls should provide the pollution reduction necessary for a water body to meet water quality standards. A TMDL is the sum of the allowable pollutant loads of a single pollutant from

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all contributing point sources (the waste load allocations or WLAs) and non-point sources (load allocations or LAs), plus the contribution from background sources and a margin of safety. (40 CFR section 130.2(i).) MS4 discharges are considered point source discharges. For 303(d)-listed water bodies and pollutants in the Los Angeles Region, the Regional Water Board or USEPA develops and adopts TMDLs that specify these requirements.

Over the last decade, the Regional Water Board and USEPA have established 33 TMDLs to remedy water quality impairments in various water bodies within Los Angeles County. (See Attachment K of this Order for a list of TMDLs by Watershed Management Area for Los Angeles County.) These TMDLs identify MS4 discharges as a source of pollutants to these water bodies and, as required, establish WLAs for MS4 discharges to reduce the amount of pollutants discharged to receiving waters. Section 402(p)(3)(B)(iii) of the Clean Water Act requires the Regional Water Board to impose permit conditions, including: “management practices, control techniques and system, design and engineering methods, and *such other provisions as the Administrator of the State determines appropriate for the control of such pollutants.*” (emphasis added.) Section 402(a)(1) of the Clean Water Act also requires states to issue permits with conditions necessary to carry out the provisions of the Clean Water Act. Federal regulations also require that NPDES permits contain effluent limits consistent with the assumptions and requirements of all available WLAs (40 CFR § 122.44(d)(1)(vii)(B)). California Water Code section 13377 also requires that NPDES permits include limitations necessary to implement water quality control plans. Therefore, this Order includes effluent limitations and other provisions to implement the TMDL WLAs assigned to permittees regulated by the LA County MS4 Permit.

The Regional Water Board has previously established numeric effluent limitations to implement TMDL WLAs when it reopened Order No. 01-182 in 2009 to incorporate permit provisions to implement the Los Angeles River Watershed Trash TMDL WLAs. In that case, Permittees have the option to employ three general compliance strategies to achieve the numeric effluent limitations. Depending on the strategy selected, the Permittee may demonstrate compliance either by documenting the percentage of its area addressed by full capture systems (“action-based” demonstration) or by calculating its annual trash discharge to the MS4 and comparing that to its effluent limitation. This approach allows the Permittee the flexibility to comply with the numeric effluent limitations using any lawful means, and establishes appropriate and enforceable compliance metrics depending on the method of compliance and level of assurance provided by the Permittee that the selected method will achieve the numeric effluent limitations derived from the TMDL WLAs. A similar approach is used for the 32 other TMDLs incorporated into this Order, where appropriate.

F. Other Plans, Policies and Regulations

This Order implements all other applicable federal regulations and State plans, policies and regulations, including the California Toxics Rule at 40 CFR section 131.38.

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IV. RATIONALE FOR DISCHARGE SPECIFICATIONS

A. Discharge Prohibitions – Non-Storm Water Discharges

1. Regulatory Background

The CWA employs the strategy of prohibiting the discharge of any pollutant from a point source into waters of the United States unless the discharger of the pollutant(s) obtains an NPDES permit pursuant to CWA section 402. The 1987 amendment to the CWA included section 402(p) that specifically addresses NPDES permitting requirements for municipal discharges from MS4s. Section 402(p) prohibits the discharge of pollutants from specified MS4s to waters of the United States except as authorized by an NPDES permit and identifies the substantive standards for MS4 permits. MS4 permits (1) “shall include a requirement to effectively prohibit non-stormwater discharges into the storm sewers[]” and (2) “shall require [i] controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and [ii] such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.” (CWA § 402(p)(3)(B)(ii-iii).)

On November 16, 1990, USEPA published regulations to implement the 1987 amendments to the CWA. (55 Fed.Reg. 47990 et seq. (Nov. 16, 1990)). The regulations establish minimum requirements for MS4 permits. The regulations address both storm water and non-storm water discharges from MS4s; however, the minimum requirements for each are significantly different. This is evident from USEPA’s preamble to the storm water regulations, which states that “Section 402(p)(B)(3) [of the CWA] requires that permits for discharges from municipal separate storm sewers require the municipality to “effectively prohibit” non-storm water discharges from the municipal storm sewer ... Ultimately, such non-storm water discharges through a municipal separate storm sewer system must either be removed from the system or become subject to an NPDES permit.” (55 Fed.Reg. 47990, 47995 (Nov. 16, 1990).⁵ USEPA states that MS4 Permittees are to begin to fulfill the “effective prohibition of non-storm water discharges” requirement by: (1) conducting a screening analysis of the MS4 to provide information to develop priorities for a program to detect and remove illicit discharges, (2) implementing a program to detect and remove illicit discharges, or ensure they are covered by a separate NPDES permit, and (3) to control improper disposal into the storm sewer. (40 CFR § 122.26(d)(2)(iv)(B).) These non-storm water discharges therefore are not subject to the MEP standard.

“Illicit discharges” defined in the regulations is the most closely applicable definition of “non-storm water” contained in federal law and the terms are often used interchangeably. In fact, “illicit discharge” is defined by USEPA in its 1990 rulemaking, as “any discharge through a municipal separate storm sewer that is not

⁵ USEPA further states that, “[p]ermits for such [non-storm water] discharges must meet applicable technology-based and water-quality based requirements of Sections 402 and 301 of the CWA.” (55 Fed. Reg. 47990, 48037 (Nov. 16, 1990).

composed entirely of storm water and that is not covered by an NPDES permit [other than the permit for the discharge from the MS4].” (55 Fed.Reg. 47990, 47995).

2. Definition of Storm Water and Non-Storm Water

Federal regulations define “storm water” as “storm water runoff, snow melt runoff, and surface runoff and drainage.” (40 C.F.R. § 122.26(b)(13).) While “surface runoff and drainage” is not defined in federal law, USEPA’s preamble to the federal regulations demonstrates that the term is related to precipitation events such as rain and/or snowmelt. (55 Fed.Reg. 47990, 47995-96 (Nov. 16, 1990)). For example, USEPA states:

In response to the comments [on the proposed rule] which requested EPA to define the term ‘storm water’ broadly to include a number of classes of discharges which are not in any way related to precipitation events, EPA believes that this rulemaking is not an appropriate forum for addressing the appropriate regulation under the NPDES program of such non-storm water discharges Consequently, the final definition of storm water has not been expanded from what was proposed.

(*Ibid.*) The storm water regulations themselves identify numerous categories of discharges including landscape irrigation, diverted stream flows, discharges from ~~potable~~ drinking water supplier sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, and street wash water as “non-storm water.” While these types of discharges may be regulated under storm water permits, they are not considered storm water discharges. (40 CFR § 122.26(d)(2)(iv)(B)). USEPA states that, “in general, municipalities will not be held responsible for prohibiting some specific components of discharges or flows ... through their municipal separate storm sewer system, *even though such components may be considered non-storm water discharges...*” (emphasis added). However, where certain categories of non-storm water discharges are identified by the Permittee (or the Regional Water Board) as needing to be addressed, they are no longer exempt and become subject to the effective prohibition requirement in CWA section 402(p)(3)(B)(ii). This review of the storm water regulations and USEPA’s discussion of the definition of storm water in its preamble to these regulations strongly supports the interpretation that storm water includes only precipitation-related discharges. Therefore, non-precipitation related discharges are not storm water discharges and, therefore, are not subject to the MEP standard in CWA section 402(p)(3)(B)(iii). Rather, non-storm water discharges shall be effectively prohibited pursuant to CWA section 402(p)(3)(B)(ii).

3. Non-Storm Water Regulation

Non-storm water discharges from the MS4 that are not authorized by separate NPDES permits, nor specifically exempted, are subject to requirements under the NPDES program, including discharge prohibitions, technology-based effluent limitations and water quality-based effluent limitations (40 CFR § 122.44). USEPA’s preamble to the storm water regulations also supports the interpretation that

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regulation of non-storm water discharges through an MS4 is not limited to the MEP standard in CWA section 402(p)(3)(B)(iii):

“Today’s rule defines the term “illicit discharge” to describe any discharge through a municipal separate storm sewer system that is not composed entirely of storm water and that is not covered by an NPDES permit. Such illicit discharges are not authorized under the Clean Water Act. Section 402(p)(3)(B) requires that permits for discharges from municipal separate storm sewers require the municipality to “effectively prohibit” non-storm water discharges from the municipal separate storm sewer...Ultimately, such non-storm water discharges through a municipal separate storm sewer must either be removed from the system or become subject to an NPDES permit.” (55 Fed.Reg. 47990, 47995.)

In its 1990 rulemaking, USEPA explained that the illicit discharge detection and elimination program requirement was intended to begin to implement the Clean Water Act’s provision requiring permits to “effectively prohibit non-storm water discharges.” (55 Fed.Reg. 47990, 47995.)

4. Authorized and Conditionally Exempt Non-Storm Water Discharges

The previous permit, Order No. 01-182, contained provisions exempting several categories of non-storm water discharges from the discharge prohibition, including discharges covered by a separate individual or general NPDES permit for non-storm water discharges, natural flows, flows from emergency fire fighting activity, and flows incidental to urban activities. This Order retains these same categories, but with several enhancements. Natural flows specified in this Order include natural springs and rising ground water; flows from riparian habitats and wetlands; diverted stream flows authorized by the State or Regional Water Board; and uncontaminated ground water infiltration. Flows incidental to urban activities specified in this Order include landscape irrigation; dechlorinated/debrominated swimming pool discharges; dewatering of lakes and decorative fountains; non-commercial car washing by residents or by non-profit organizations; and street/sidewalk washwater. This Order separately identifies flows from non-emergency fire fighting activities and discharges from ~~potable-drinking~~ water supplier distribution sources-systems as “essential” non-storm water discharges rather than combining them into the same category as the other non-storm water discharges incidental to urban activities. In doing so, the Regional Water Board recognizes that these discharges are essential public service discharge activities and are directly or indirectly required by other state or federal statute and/or regulation. This Order continues to unconditionally exempt emergency fire fighting discharges from the discharge prohibition.

Like Order No. 01-182, this Order contains a provision that the Regional Water Board Executive Officer may add or remove categories of exempt non-storm water discharges. In addition, in the event that any of the categories of non-storm water discharges are determined to be a source of pollutants by the Executive Officer then the discharges will no longer be exempt unless the Permittee implements conditions approved by the Executive Officer to ensure that the discharge is not a source of

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pollutants. Also the Executive Officer may impose additional prohibitions of non-storm water discharges in consideration of antidegradation policies and TMDLs.

5. BMPs for Non-Storm Water Discharges

In this Order, no changes have been made to the types of non-storm water discharges included in the non-storm water discharge prohibition exemptions, with one exception related to temporary discharges authorized by USEPA pursuant to sections 104(a) or 104(b) of CERCLA. However, the non-storm water discharge provisions in this Order have been reworded to clarify the requirements for addressing authorized and conditionally exempt non-storm water discharges that are not prohibited. In particular, language has been added to explicitly identify State and Regional Water Board permits that are applicable to some of the exempted non-storm water discharges. The State and Regional Water Board general permits referenced in this Order and their applicability to the different types of non-storm water discharges that are routinely discharged through the MS4 is contained in Table F-4 below.

Table F-4. State and Regional Water Board General Permits Referenced in this Permit

Order/NPDES Permit No.	Applicable Types of Discharges
NPDES Permit No. CAG994003 – Discharges of Nonprocess Wastewater to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties	<ul style="list-style-type: none"> • Ground water seepage • Uncontaminated pumped ground water • Gravity flow from foundation drains, footing drains, and crawl space pumps • Air conditioning condensate • Discharges of cleaning wastewater and filter backwash
NPDES Permit No. CAG994004 – Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties	<ul style="list-style-type: none"> • Uncontaminated pumped ground water • Discharges from activities that occur at wellheads, such as well construction, well development (e.g., aquifer pumping tests, well purging), or major well maintenance • Gravity flow from foundation drains, footing drains, and crawl space pumps • Discharges of ground water from construction and project dewatering⁶

⁶ Discharges of ground water from construction and project dewatering include treated or untreated wastewater from permanent or temporary construction dewatering operations; ground water pumped as an aid in the containment and/or cleanup of a contaminant plume; ground water extracted during short-term and long-term pumping/aquifer tests; ground water generated from well drilling, construction or development and purging of wells; equipment decontamination water; subterranean seepage dewatering; incidental collected storm water from basements; and other process and non-process

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Order/NPDES Permit No.	Applicable Types of Discharges
NPDES Permit No. CAG990002 – Discharges from Utility Vaults and Underground Structures to Surface Waters	<ul style="list-style-type: none"> • Uncontaminated pumped ground water • Gravity flow from foundation drains, footing drains, and crawl space pumps
NPDES Permit No. CAG674001 – Discharges From Hydrostatic Test Water to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties	<ul style="list-style-type: none"> • Discharges of low threat hydrostatic test water⁷
NPDES Permit No. CAG914001 – Discharges of Treated Groundwater from Investigation and/or Cleanup of Volatile Organic Compounds Contaminated-Sites to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties	<ul style="list-style-type: none"> • Discharges of treated ground water from investigation and/or cleanup of volatile organic compound (VOC) contaminated sites
NPDES Permit No. CAG994005 – Discharges of Ground Water from Water Supply Wells to Surface Waters in Los Angeles and Ventura Counties	<ul style="list-style-type: none"> • Discharges of ground water from potable water supply wells⁸
NPDES Permit No. CAG834001 – Waste Discharge Requirements for Treated Groundwater and Other Wastewaters from Investigation and/or Cleanup of Petroleum Fuel-Contaminated Sites to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties	<ul style="list-style-type: none"> • Discharges of treated ground water and other waste waters from investigation and/or cleanup of petroleum fuel contaminated sites

This Order explicitly adds another category of authorized non-storm water discharge for discharges authorized by USEPA pursuant to sections 104(a) or 104(b) of the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). These discharges typically consist of short-term, high volume discharges resulting from the development or redevelopment of groundwater extraction wells, or USEPA or State-required compliance testing of potable water treatment plants, as part of a USEPA authorized groundwater remediation action under CERCLA. These discharges through the MS4 are only authorized if: (i) the discharge will comply with

wastewater discharges that meet the eligibility criteria and could not be covered under another specific general NPDES permit.

⁷ Low threat hydrostatic test water means discharges resulting from the hydrostatic testing or structural integrity testing of pipes, tanks, or any storage vessels using domestic water or from the repair and maintenance of pipes, tanks, or reservoirs.

⁸ Discharges covered by this permit include ground water from potable water supply wells generated during the following activities: ground water generated during well purging for data collection purposes; ground water extracted from major well rehabilitation and redevelopment activities; and ground water generated from well drilling, construction, and development.

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water quality standards identified as applicable or relevant and appropriate requirements (“ARARs”) under section 121(d)(2) of CERCLA; or (ii) the discharge is subject to either (a) a written waiver of ARARs by USEPA pursuant to section 121(d)(4) of CERCLA or (b) a written determination by USEPA that compliance with ARARs is not practicable considering the exigencies of the situation, pursuant to 40 CFR section 300.415(j). Additionally, a decision to authorize a discharge through the MS4 to surface waters will not be made by USEPA without first conducting a comprehensive evaluation of containment, treatment, reinjection, or re-use options for the water generated from the subject wells. If a decision to discharge through the MS4 is made, USEPA’s authorization of the discharge under CERCLA will require that the discharger shall:

- (1) Implement BMPs to minimize the rate and duration of the discharge and remove excessive solids, and implement other on-site physical treatment where feasible.
- (2) Promote infiltration of discharged water in locations that will prevent or minimize degradation of groundwater quality.
- (3) Notify the affected MS4 Permittees, including the LACFCD and the MS4 Permittee with land use authority over the discharge location, and the Regional Water Board at least one week prior to a planned discharge (unless USEPA determines in writing that exigent circumstances require a shorter notice period) and as soon as possible (but no later than 24 hours after the discharge has occurred) for unplanned discharges;
- (4) Monitor any pollutants of concern in the discharge⁹; and
- (5) Maintain records for all discharges greater than 100,000 gallons.¹⁰

In addition to requiring NPDES permit coverage for applicable categories of non-storm water discharges, this Order contains language that specifies certain conditions, including implementation of BMPs, for each category of conditionally exempt non-storm water discharge that must be met in order for the non-storm water discharge to be exempted from the non-storm water prohibition and thus allowed through the MS4.

The California Recycled Water Policy, adopted by the State Water Board in Resolution No. 2009-0011, calls for an increase in the use of recycled water from

⁹ Pollutants of concern include, at a minimum, trash and debris, including organic matter, TSS, any pollutant being addressed by the groundwater remediation action under CERCLA, and any pollutant for which there is a Water Quality Based Effluent Limitation in Part VI.E applicable to discharges from the MS4 to the receiving water.

¹⁰ Records shall be maintained, as appropriate, on the: name of CERCLA authorized discharger, date and time of notification (for planned discharges), method of notification, location of discharge, discharge pathway, receiving water, date of discharge, time of the beginning and end of the discharge, duration of the discharge, flow rate or velocity, estimated total number of gallons discharged, type of pollutant removal equipment used, type of dechlorination equipment used if applicable, type of dechlorination chemicals used if applicable, concentration of residual chlorine if applicable, type(s) of sediment controls used, and field and laboratory monitoring data. Records shall be retained for three years, unless the Regional Water Board requests a longer record retention period and shall be made available upon request by the MS4 Permittee or the Regional Water Board.

municipal wastewater sources that meet the definition in California Water Code section 13050(n), in a manner that implements state and federal water quality laws. In support of the California Recycled Water Policy, a provision has been added requiring that alternative means of disposal or opportunities for capture, reclamation, and reuse must be evaluated prior to discharging any of the non-storm water discharge categories to the MS4. In addition, to ensure the protection of receiving water quality all non-storm water discharges must be segregated from potential sources of pollutants to prevent the introduction of pollutants to the discharge.

In establishing provisions specific to different non-storm water discharge types, the Regional Water Board reviewed non-storm water discharge provisions and BMPS included in other area MS4 permits. MS4 permits reviewed included the Ventura County MS4 permit (R4-2009-0057), the Orange County MS4 permit (Order No. R9-2009-0002), the Riverside County MS4 permit (R9-2010-0016), and the San Diego County MS4 permit (R9-2007-0001). Conditions established in this permit for each of the non-storm water discharge categories ensure the protection of receiving water quality and are considered common practices.

Dischargers permitted under NPDES Permit No. CAG990002 are required to contact the appropriate Permittee(s) with jurisdiction over the MS4, including but not limited to the Los Angeles County Flood Control District, within 24 hours, whenever there is a discharge of 50,000 gallons or more from utility vaults and underground structures to the MS4.

The conditions for landscape irrigation have been split into potable and reclaimed landscape irrigation categories. As identified in the Orange County MS4 permit incidental runoff from landscape irrigation projects including over irrigation and overspray have the potential to contribute landscape derived pollutants such as bacteria, nutrients, and pesticides to receiving waters. In addition, the California Recycled Water Policy identifies the need for control of incidental runoff from landscape irrigation projects, particularly as it relates to recycled water use. The BMPs incorporated into the permit for potable landscape irrigation ensure that water is conserved, overspray and over irrigation causing incidental runoff is minimized, and exposure to landscape related pollutants is minimized.

State Water Board Water Quality Order No. 2009-0006-DWQ, General Waste Discharge Requirements for Landscape Irrigation Uses of Municipal Recycled Water, is a general permit for producers and distributors of recycled water for landscape irrigation uses. As part of this general permit, the producers and distributors of recycled water for landscape irrigation are required to develop an Operations and Maintenance Plan (O&M Plan) that includes an Operations Plan and an Irrigation Management Plan. Therefore, any reclaimed landscape irrigation discharges to the MS4 must comply with the relevant portion of the O&M Plan including the Irrigation Management Plan. By explicitly referencing the O&M requirement in this permit, it centralizes the requirements for reclaimed landscape irrigation and helps to ensure that procedures are in place for conserving water, minimizing incidental runoff, and minimizing exposure to landscape related pollutants.

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Non-storm water discharge provisions have been added for the dewatering of lakes to the MS4. The provisions for the dewatering of lakes including removing and legally disposing of all visible trash on the shoreline or on the surface of the lake and the cleaning of the MS4 inlet and outlet where the water will be discharged to the receiving water have been consistently incorporated into Regional Water Board authorizations to discharge non-storm water from lakes, reservoirs, and ponds. In addition provisions for volumetrically and velocity controlling discharges as well as taking measurements to stabilize lake bottom sediments are incorporated into the provisions of this Order to ensure that turbidity in receiving waters are maintained at an acceptable level. The permit provisions for the dewatering of lakes ensure the protection of receiving water quality.

Basin plan requirements for residual chlorine have been explicitly included in the conditions for ~~potable~~ drinking water ~~supply-supplier and~~ distribution system releases, dechlorinated/debrominated swimming pool/spa discharges, and dewatering of decorative fountains. Related to swimming pool discharges, discharges of cleaning wastewater and filter backwash are specifically mentioned as being allowed only if authorized under a separate NPDES permit. The Regional Water Board has a general permit for discharges of nonprocess wastewater to surface waters in coastal watersheds of Los Angeles and Ventura counties (NPDES Permit No. CAG994003) that may address discharges of cleaning wastewater and filter backwash.

Specific BMPs for discharges of swimming pools/spas and the dewatering of decorative fountains have been added to this Order including prohibiting the dewatering of swimming pools/spas or decorative fountains containing copper-based algaecides and requiring the implementation of controls to prevent introduction of pollutants prior to discharge. Swimming pool/spa discharges and decorative fountain water must be dechlorinated or debrominated using holding time, aeration, and/or sodium thiosulfate and if necessary shall be pH adjusted to within the range of 6.5 and 8.5. The MS4 inlet and outlet must be inspected and cleaned out immediately prior to discharge to protect receiving water quality. In addition provisions for volumetrically and velocity controlling discharges are incorporated into the provisions of this Order to ensure that turbidity in receiving waters are maintained at an acceptable level.

In addition to the specific inclusion of Basin Plan water quality objectives for residual chlorine, this Order allows discharges of ~~potable~~ drinking water ~~supply-supplier and~~ distribution system releases as long as specified BMPs are implemented. BMPs must be implemented to prevent introduction of pollutants to ~~potable drinking water supplier distribution system water~~ releases prior to discharge to the receiving water. BMPs must be consistent with the American Water Works Association (California – Nevada Section) BMP Manual for Drinking Water System Releases and other applicable guidelines. Similar to discharges of swimming pools/spas and dewatering of decorative fountains, ~~potable~~ drinking water ~~supply-supplier distribution system~~ releases must be dechlorinated or debrominated using holding time, aeration, and/or sodium thiosulfate and if necessary shall be pH adjusted to within the range of 6.5

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and 8.5. The MS4 inlet and outlet must be inspected and cleaned out immediately prior to discharge to protect receiving water quality. BMPs such as sand bags or gravel bags, or other appropriate means shall be utilized to prevent sediment transport and all sediment shall be collected and disposed of in a legal and appropriate manner. In addition provisions for volumetrically and velocity controlling discharges are incorporated into the provisions of this Order to ensure that turbidity in receiving waters are maintained at an acceptable level.

The permit provisions for ~~potable~~-drinking water supply and distribution system releases, dechlorinated/debrominated swimming pool/spa discharges, and dewatering of decorative fountains ensures the protection of receiving water quality.

The Regional Water Board evaluated and established a list of approved BMPs for various programs and activities through Regional Water Board Resolution 98-08 that serves as appropriate BMPs for inclusion in the Discharger and Permittees' regulatory programs. Requirements for street/sidewalk wash water contained in Resolution 98-08 have also been explicitly incorporated into this Order. The inclusion of the requirements contained in Resolution 98-08 helps to ensure that Permittees are aware of the requirements and ensures the protection of receiving water quality.

Specific BMPs for discharges from non-commercial car washing have been incorporated into this Order to prevent the introduction of pollutants prior to discharge. BMPs that must be implemented for the discharge of non-commercial vehicle wash water include minimizing the amount of water used by turning off nozzles or kinking the hose when not spraying a vehicle and by using a pressure washer; using biodegradable, phosphate free detergents and non-toxic cleaning products; where possible, washing vehicles on permeable surfaces where wash water can percolate into the ground; creating a temporary berm or block off the storm drains; using pumps or vacuums to direct water to pervious areas; and emptying buckets of soapy water or rinse water into the sanitary sewer system. These BMPs are common practice and ensure the protection of receiving water quality.

The inclusion of conditions for flows related to non-emergency fire-fighting activities is new to this iteration of the permit. Conditions for discharges related to fire fighting activities have been incorporated into other MS4 permits including both Orange County and Riverside County. Flows resulting from emergency fire fighting activities necessary for the protection of life or property do not require implementation of specific BMPs.

The specific BMPs for discharges associated with non-emergency fire fighting activities that have been incorporated into this Order have been incorporated into other California MS4 permits. Both the Riverside County and Orange County MS4 permits require the development and implementation of a program to address pollutants from non-emergency fire fighting flows. Rather than develop a program to address non-emergency fire fighting flows, common BMPs used in association with non-emergency fire fighting discharges have been incorporated into this Order.

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Guidance on BMPs contained in this Order for non-emergency fire fighting activities is available in the Best Management Practices Plan for Urban Runoff Management for Participating Riverside County Fire Fighting Agencies.

The inclusion of specific conditions for exempted non-storm water discharges in this Order centralizes the requirements for non-storm water discharges. Conditions established in this permit for each of the conditionally exempt non-storm water discharge categories are common practice and have been incorporated into other area MS4 permits.

6. Permittee Requirements for Non-Storm Water Discharges

This Order includes specific requirements for Permittees related to more targeted screening of MS4 outfalls for non-storm water discharges, and monitoring and evaluation of significant non-storm water discharges. Permittees are required to develop and implement procedures to ensure that all conditions required for conditionally exempt non-storm water discharges are being implemented. These requirements also help to clarify the responsibilities of the Permittees versus the responsibilities of the non-MS4 Permittee dischargers to the MS4. The development and implementation of these procedures helps to ensure compliance with the non-storm water discharge prohibition and ensure that the non-storm water discharges are not sources of pollutants.

B. Technology-Based Effluent Limitations

Section 301(b)(1)(A) of the CWA and 40 CFR section 122.44(a) require that NPDES permits include technology based effluent limitations.¹¹ In 1987, the CWA was amended to require that municipal storm water discharges “reduce the discharge of pollutants to the maximum extent practicable.” (CWA § 402(p)(3)(B)(iii).) The “maximum extent practicable” (MEP) standard is the applicable federal technology based standard that MS4 owners and operators must attain to comply with their NPDES permits.¹² The corresponding regulatory provisions that further detail the MEP standard can be found in 40 CFR sections 122.26(d)(2)(iv) and 122.44(k)(2).

Neither Congress nor the USEPA has specifically defined the term “maximum extent practicable.” Rather, the MEP standard is a flexible and evolving standard. Congress established this flexible MEP standard so that administrative bodies would have “the tools to meet the fundamental goals of the Clean Water Act in the context of storm water pollution.”¹³ This standard was designed to allow permit writers flexibility to tailor permits to the site-specific nature of MS4s and to use a combination of pollution controls that may be different in different permits.¹⁴ The MEP standard is also expected to evolve

¹¹ A technology based effluent limitation is based on the capability of a model treatment method to reduce a pollutant to a certain concentration (NPDES Permit Writer’s Manual, Appendix A). Technology based requirements represent the minimum level of control that must be imposed in a permit issued under CWA § 402.

¹² Note that the MEP standard only applies to storm water discharges from the MS4. Non-storm water discharges are subject to a different standard – specifically, non-storm water discharges through the MS4 must be effectively prohibited.

¹³ *Building Industry Ass’n of San Diego County v. State Water Resources Control Board* (2004) 124 Cal.App.4th 866, 884.

¹⁴ *In re City of Irving, Texas, Municipal Storm Sewer System*, (July 16, 2001), 10 E.A.D. 111 (E.P.A.), *6.

in light of programmatic improvements, new source control initiatives, and technological advances that serve to improve the overall effectiveness of storm water management programs in reducing pollutant loading to receiving waters. This is consistent with USEPA's interpretation of storm water management programs. As explained by USEPA in its 1990 rulemaking, "EPA anticipates that storm water management programs will evolve and mature over time" (55 Fed.Reg. 47990, 48052 (Nov. 16, 1990)). There is ample evidence of this evolution in storm water management. Two local examples include the development of full capture trash control devices in response to the Los Angeles Region Trash TMDLs, and the development of innovative media filters for use in outfalls at the Boeing Santa Susana Field Laboratory that have potential municipal applications.

To provide clarification to the Regional Water Boards, the State Water Board's Office of Chief Counsel issued a memorandum dated February 11, 1993 regarding the "Definition of 'Maximum Extent Practicable'". In the memorandum, the State Water Board interpreted the MEP standard to entail "a serious attempt to comply," and that under the MEP standard, "practical solutions may not be lightly rejected." The memorandum states, "[i]n selecting BMPs which will achieve MEP, it is important to remember that municipalities will be responsible to reduce the discharge of pollutants in storm water to *the maximum extent practicable*. This means choosing effective BMPs, and rejecting applicable BMPs only where other effective BMPs will serve the same purpose, the BMPs would not be technically feasible, or the cost would be prohibitive." The memorandum further states that, "[a]fter selecting a menu of BMPs, it is of course the responsibility of the discharger to insure that all BMPs are implemented."

This Order includes programmatic requirements in six areas pursuant to 40 CFR section 122.26(d)(2)(iv) as well as numeric design standards for storm water runoff from new development and redevelopment consistent with the federal MEP standard (see State Water Board Order WQ 2000-11, the "LA SUSMP Order"). This Order also includes protocols for periodically evaluating and modifying or adding control measures, consistent with the concept that MEP is an evolving and flexible standard.

This Order also provides for the use of municipal action levels ("MALs") derived from the National Stormwater Quality Database (NSQD), as a means of evaluating the overall effectiveness of a Permittee's storm water management program in reducing pollutant loads from a particular drainage area and in order to assess compliance with the MEP standard. Finally, this Order includes BMP Performance Standards derived from the International BMP Database as a guide for BMP selection and design, and as a tool for evaluating the effectiveness of individual post-construction BMPs in reducing pollutant loads and assessing compliance with the MEP standard. USEPA recommends the use of numeric benchmarks for BMPs to estimate BMP effectiveness and as triggers for taking additional actions such as evaluating the effectiveness of individual BMPs, implementing and/or modifying BMPs, or providing additional measures to protect water quality.¹⁵

¹⁵ See USEPA November 22, 2002 memorandum, "Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs."

C. Water Quality-Based Effluent Limitations (WQBELs)

In addition to requiring that MS4 permits include technology based requirements consistent with the MEP standard, section 402(p)(3)(B)(iii) of the CWA authorizes the inclusion of “such other provisions as the Administrator or the State determines appropriate for the control of [] pollutants.”¹⁶ This requirement gives USEPA or the State permitting authority discretion to determine what permit conditions are necessary to control pollutants. Generally, permit requirements designed to achieve water quality standards are referred to as water quality based effluent limitations (WQBELs). A WQBEL is a restriction on the quantity or concentration of a pollutant that may be discharged from a point source into a receiving water that is necessary to achieve an applicable water quality standard in the receiving water.¹⁷ WQBELs may be expressed narratively or numerically.

In its Phase I Stormwater Regulations, Final Rule, USEPA elaborated on these requirements, stating that, “permits for discharges from municipal separate storm sewer systems must require controls to reduce the discharge of pollutants to the maximum extent practicable, and where necessary water quality-based controls” (see 55 Fed.Reg. 47990, 47994 (Nov. 16, 1990)). In December 1999, USEPA reiterated in its Phase II Stormwater Regulations, Final Rule that MS4 “permit conditions must provide for attainment of applicable water quality standards (including designated uses), allocations of pollutant loads established by a TMDL, and timing requirements for implementation of a TMDL.”¹⁸ The State Water Board has affirmed that MS4 permits must include requirements necessary to achieve compliance with the applicable technology based standard of MEP and to achieve water quality standards.¹⁹

WQBELs are required for point source discharges that have the reasonable potential to cause or contribute to an excursion of water quality standards and technology based effluent limitations or standards are not sufficient to achieve water quality standards.²⁰

The State Water Board has previously concluded that sole reliance in MS4 permits on BMP based requirements is not sufficient to ensure attainment of water quality standards. (See State Water Board Order 2001-015). The Regional Water Board concurs with this conclusion. This conclusion is amply supported by Regional Water Board and USEPA established TMDLs for impaired waters in the Los Angeles Region, indicating that MS4 discharges are a continuing source of pollutants to the impaired receiving waters notwithstanding the implementation of storm water management

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¹⁶ The first and second iterations of the Los Angeles County MS4 Permit relied solely upon requirements consistent with the MEP standard to work toward achieving water quality standards. Note that the MEP standard is distinct from a water quality based standard; each has a different basis. Therefore, while from a practical point of view, the goal of all MS4 permit conditions is to control pollutants in discharges to ultimately achieve certain water quality outcomes, water quality based standards are directly derived from this desired outcome, while the MEP standard is anticipated to be a way of working toward the desired outcome, but is not directly derived from it.

¹⁷ See 40 CFR § 122.2; NPDES Permit Writer’s Manual, Appendix A. A WQBEL is distinguished from a technology based effluent limitation (TBEL) in that the basis for the WQBEL is the applicable water quality standard for the receiving water, while the basis for the TBEL is generally the performance of the best available technology.

¹⁸ See, e.g., Phase II Stormwater Regulations, Final Rule, 64 Fed. Reg. 68722, 68737.

¹⁹ See, e.g., State Water Board Orders WQ 99-05 and 2001-15.

²⁰ 40 CFR §§ 122.44(d)(1)(i); 122.44(d)(1)(iii)

programs that have been driven by the MEP standard by Permittees for the last two decades.

In this Order, WQBELs are included where the Regional Water Board has determined that discharges from the MS4 have the reasonable potential to cause or contribute to an excursion above water quality standards.²¹ Reasonable potential can be demonstrated in several ways, one of which is through the TMDL development process. Where a point source is assigned a WLA in a TMDL, the analysis conducted in the development of the TMDL provides the basis for the Regional Water Board's determination that the discharge has the reasonable potential to cause or contribute to an exceedance of water quality standards in the receiving water. This approach is affirmed in USEPA's Permit Writer's Manual, which states, "[w]here there is a pollutant with a WLA from a TMDL, a permit writer must develop WQBELs." Therefore, WQBELs are included in this Order for all pollutants for which a WLA is assigned to MS4 discharges.

Federal regulations further require that, "when developing water quality-based effluent limits...the permitting authority shall ensure that effluent limits ... are consistent with the assumptions and requirements of any available wasteload allocation for the discharge..." (40 CFR § 122.44(d)(1)(vii)(B)).

The Regional Water Board interprets this to mean that the final WQBEL must be expressed in similar terms as the underlying WLA; for example, where a TMDL includes WLAs for MS4 discharges that provide numeric pollutant load objectives, the WLA should be translated into numeric WQBELs in the permit, and at a level to achieve the same expected water quality outcome. USEPA also recommends the use of numeric WQBELs to meet water quality standards where MS4 discharges have the reasonable potential to cause or contribute to a water quality standard excursion. Numeric WQBELs will help clarify MS4 permit requirements and improve accountability in this permit term.

While BMPs²² are central to MS4 permits, permit requirements may only rely upon BMP based limitations in lieu of water quality based effluent limitations if: (1) the BMPs are adequate to achieve water quality standards, and (2) numeric effluent limitations are infeasible.²³ As discussed earlier, the State and Regional Water Boards have concluded that sole reliance on MEP based permit requirements is not sufficient to ensure the achievement of water quality standards. Further, there is insufficient data and information available at this time on the prospective implementation of BMPs throughout Los Angeles County to provide the Regional Water Board reasonable assurance that the BMPs would be sufficient to achieve the WQBELs.²⁴

²¹ 40 CFR §§ 122.44(d)(1)(i)-(iii); 122.44(d)(1)(vii)(B)

²² Note that best management practices and effluent limitations are two different types of permit requirements (see 40 CFR §§ 122.2; 122.44(k), which distinguish the two terms and describe their relationship to each other).

²³ 40 CFR §§ 122.44(d)(1); 122.44(k)(3); see also State Water Board Order 91-03; Memorandum from Elizabeth Miller Jennings, Office of Chief Counsel to Bruce Fujimoto, Division of Water Quality, "Municipal Storm Water Permits: Compliance with Water Quality Objectives," October 3, 1995.

²⁴ USEPA states in its 2002 memorandum, "Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs" that, "[w]hen a non-numeric water quality-based effluent limit is imposed, the permit's administrative record, including the fact sheet when one is required, needs to support that the BMPs are expected to be sufficient to implement the WLA in the TMDL," citing 40 CFR §§ 124.8, 124.9, and 124.18. See also USEPA's 2010 memorandum revising the 2002 memorandum.

Regarding the feasibility of numeric effluent limitations, the Regional Water Board concludes that numeric WQBELs are feasible. While a lack of data may have hampered the development of numeric effluent limitations for MS4 discharges in earlier permit cycles, in the last decade, 33 TMDLs have been developed for water bodies in Los Angeles County in which WLAs are assigned to MS4 discharges. In each case, part of the development process entailed analyzing pollutant sources and allocating loads using empirical relationships or modeling approaches. As a result, it is possible to use these numeric WLAs to derive numeric WQBELs for MS4 discharges. USEPA has also acknowledged that its expectations regarding the application of numeric WQBELs to municipal storm water discharges have changed as the storm water permit program has continued to mature over the last decade.²⁵

The inclusion of numeric WQBELs is also consistent with the Ninth Circuit Court of Appeal's ruling in *Defenders of Wildlife v. Browner* (191 F.3d 1159, 1166 (1999)) that the permitting authority has discretion regarding the nature and timing of requirements that it includes as MS4 permit conditions to attain water quality standards, and that these requirements may include numeric effluent limitations.

Further, given the variability in implementation of storm water management programs across Permittees, numeric WQBELs create an objective, equitable and accountable means of controlling MS4 discharges, while providing the flexibility for Permittees to comply with the WQBELs in any lawful manner.

D. Final Effluent Limitations

Final WQBELs are included in this Order based on the final WLAs assigned to discharges from the Los Angeles County MS4 in all available TMDLs.

MS4 permits can include compliance schedules for achieving final WQBELs derived from TMDL WLAs, so long as the compliance schedule is consistent with a TMDL implementation plan adopted by the Regional Water Board and approved through the State's basin plan amendment process. If a compliance schedule exceeds one year, it must include interim requirements pursuant to 40 CFR section 122.47.

Section 402(o) of the CWA and 40 CFR section 122.44(l) require that effluent limitations in reissued orders be at least as stringent as those in the existing order. This Order carries over the final receiving water limitations and WQBELs that were included to implement the Marina del Rey Harbor Back Basins and Mothers' Beach Bacteria TMDL and the Los Angeles River Trash TMDL, respectively, in the 2007 and 2009 amendments to Order No. 01-182.

E. Interim Effluent Limitations

²⁵ See USEPA 2010 memorandum, "Revisions to the November 22, 2002 Memorandum 'Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs'" in which USEPA states, "where the NPDES permitting authority determines that MS4 discharges...have the reasonable potential to cause or contribute to water quality standards excursions, permit for MS4s...should contain numeric effluent limitations where feasible to do so." USEPA further states, "[w]here the TMDL includes WLAs for stormwater sources that provide numeric pollutant load...objectives, the WLA should, where feasible, be translated into numeric WQBELs in the applicable stormwater permits."

Where there is a TMDL implementation plan adopted by the Regional Water Board and approved through the State's basin plan amendment process, interim WQBELs are included in this Order based on interim WLAs established for MS4 discharges.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Receiving Water Limitations

Receiving water limitations are included in all NPDES permits issued pursuant to CWA section 402. Section 402(p)(3)(B)(iii) of the CWA authorizes the inclusion of "such other provisions as the Administrator or the State determines appropriate for the control of [] pollutants." This requirement gives USEPA or the State permitting authority discretion to determine what permit conditions are necessary to control pollutants. In its Phase I Stormwater Regulations, Final Rule, USEPA elaborated on these requirements, stating that, "permits for discharges from municipal separate storm sewer systems must require controls to reduce the discharge of pollutants to the maximum extent practicable, and where necessary water quality-based controls" (see 55 Fed. Reg. 47990, 47994 (Nov. 16, 1990)). USEPA reiterated in its Phase II Stormwater Regulations, Final Rule, that MS4 "permit conditions must provide for attainment of applicable water quality standards (including designated uses), allocations of pollutant loads established by a TMDL, and timing requirements for implementation of a TMDL."²⁶ USEPA Region IX has also affirmed the agency's position that MS4 discharges must meet water quality standards in a series of comment letters on MS4 permits issued by various California regional water boards.²⁷ California Water Code section 13377 also requires that NPDES permits include limitations necessary to implement water quality control plans. Both the State Water Board and Regional Water Board have previously concluded that discharges from the MS4 contain pollutants that have the reasonable potential to cause or contribute to excursion above water quality standards. As such, inclusion of receiving water limitations is appropriate to control MS4 discharges.

The inclusion of receiving water limitations is also consistent with the Ninth Circuit Court of Appeal's ruling in *Defenders of Wildlife v. Browner* (191 F.3d 1159, 1166 (1999)) that the permitting authority has discretion regarding the nature and timing of requirements that it includes as MS4 permit conditions to attain water quality standards.

The Ninth Circuit Court of Appeals recently explained that, "[w]ater quality standards are used as a supplementary basis for effluent limitations [guidelines] so that numerous dischargers, despite their individual compliance with technology based effluent limitations, can be regulated to prevent water quality from falling below acceptable levels" (*NRDC v. County of Los Angeles* (2011) 673 F.3d 880, 886). Receiving water limitations are included in this Order to ensure that individual and collective discharges from the MS4 do not cause or contribute to exceedances of water quality standards necessary to protect the beneficial uses of the receiving waters.

²⁶ See, e.g., Phase II Stormwater Regulations, Final Rule, 64 Fed. Reg. 68722, 68737.

²⁷ See, e.g., letter from Alexis Strauss, Acting Director, Water Division, USEPA Region IX, to Walt Pettit, Executive Director, State Water Board, re: SWRCB/OCC File A-1041 for Orange County, dated January 21, 1998.

The receiving water limitations in this Order consist of all applicable numeric or narrative water quality objectives or criteria, or limitations to implement the applicable water quality objectives or criteria, for receiving waters as contained in Chapters 3 and 7 of the Basin Plan, or in water quality control plans or policies adopted by the State Water Resources Control Board, including Resolution No. 68-16, or in federal regulations, including but not limited to, 40 CFR sections 131.12 and 131.38. The water quality objectives in the Basin Plan and other State Water Board plans and policies have been approved by USEPA and combined with the designated beneficial uses constitute the water quality standards required under federal law.

The receiving water limitations provisions in this Order are the same as those included in the previous Los Angeles County MS4 Permit provisions, and are based on precedential State Water Board Orders WQ 98-01 and WQ 99-05. This Order includes three main provisions related to receiving water limitations. First, consistent with CWA section 402(p)(B)(3)(iii) and 40 CFR section 122.44(d)(1), it includes a provision stating that discharges from the MS4 that cause or contribute to an exceedance of receiving water limitations are prohibited. This is also in accord with the State Water Board’s finding in Order WQ 98-01 (“The [State Water Board] agrees that the NPDES permit must prohibit discharges that “cause” or “contribute” to violations of water quality standards.”). Second, it includes a provision stating that discharges from the MS4 of stormwater or non-stormwater, for which a Permittee is responsible, shall not cause or contribute to a condition of nuisance.²⁸

Third, it includes a provision that states that Permittees shall achieve these two prohibitions “through timely implementation of control measures and other actions to reduce pollutants in the discharges in accordance with the storm water management program and its components and other requirements of this Order including any modifications.” This third provision elucidates the process by which Permittees are expected to achieve the first two provisions and then outlines the so-called “iterative process” whereby certain actions are required when exceedances of receiving water limitations occur and discharges from the MS4 are implicated. This iterative process includes submitting a Receiving Water Limitations Compliance Report; revising the storm water management program and its components to include additional BMPs, an implementation schedule and additional monitoring to address the exceedances; and implementing the revised storm water management program. The inclusion of this protocol for estimating BMP effectiveness and taking additional actions such as implementing additional BMPs and/or modifying BMPs to improve their effectiveness when monitoring demonstrates that they are necessary to protect water quality is consistent with USEPA’s expectations for MS4 permits.²⁹

The State and Regional Water Boards have stated that each of the three provisions are independently applicable, meaning that compliance with one provision does not provide

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²⁸ Wat. Code, § 13377 (“the state board or the regional boards shall . . . issue waste discharge requirements and dredged or fill material permits which apply and ensure compliance with all applicable provisions of the [CWA], thereto, together with any more stringent effluent standards or limitations necessary to implement waste quality control plans, or for the protection of beneficial uses, or to prevent nuisance”).

²⁹ See, e.g., USEPA 2002 memorandum, “Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs.”

a “safe harbor” where there is non-compliance with another provision (i.e., compliance with the third provision does not shield a Permittee who may have violated the first or second provision from an enforcement action). Rather, the third provision is intended to ensure that the necessary storm water management programs and controls are in place, and that they are modified by Permittees in a timely fashion when necessary, so that the first two provisions are achieved as soon as possible. USEPA expressed the importance of this independent applicability in a series of comment letters on MS4 permits proposed by various regional water boards. At that time, USEPA expressly objected to certain MS4 permits that included language stating, “permittees will not be in violation of this [receiving water limitation] provision ...” (if certain steps are taken to evaluate and improve the effectiveness of the Drainage Area Management Plan (DAMP)), concluding that this phrase would not comply with the CWA.³⁰

The Receiving Water Limitations provisions of Order No. 01-182 have been litigated twice, and in both cases the courts have upheld the language and the State and Regional Water Board’s interpretation of it. Both courts ruled that the first two provisions are independently applicable from the third provision that establishes the “iterative process” requirements and no “safe harbor” exists.

The provisions were first litigated in 2005 where the Los Angeles County Superior Court stated, “In sum, the Regional [Water] Board acted within its authority when it included Parts 2.1 and 2.2 in the Permit without a ‘safe harbor,’ whether or not compliance therewith requires efforts that exceed the ‘MEP’ standard.” (*In re L.A. Cnty. Mun. Storm Water Permit Litig.* (L.A. Super. Ct., No. BS 080548, Mar. 24, 2005) Statement of Decision from Phase I Trial on Petitions for Writ of Mandate, pp. 4-5, 7.).

The provisions were again litigated in 2011. In that case, the Ninth Circuit Court of Appeal in *NRDC v. County of Los Angeles* (673 F.3d 880, 886) affirmed that the iterative process (in Part 2.3 of the 2001 Order) does not “forgive” violations of the discharge prohibitions (in Parts 2.1 and 2.2 of the 2001 Order). The court acknowledged that Part 2.3 clarifies that Parts 2 and 3 interact, but the court concluded that Part 2.3 “offers no textual support for the proposition that compliance with certain provisions shall forgive non-compliance with the discharge prohibitions.” The Ninth Circuit further concluded that, “[a]s opposed to absolving noncompliance or exclusively adopting the MEP standard, the iterative process ensures that if water quality standards ‘persist,’ despite prior abatement efforts, a process will commence whereby a responsible Permittee amends its SQMP. Given that Part 3 of the [2001] Permit states that SQMP implementation is the ‘minimum’ required of each Permittee, the discharge prohibitions serve as additional requirements that operate as enforceable water-quality-based performance standards required by the Regional Board.”

Nonetheless, the Regional Water Board is in a unique position to be able to offer multiple paths to compliance with receiving water limitations in this MS4 permit. The Regional Board has worked closely with the US EPA in implementing the requirements of the 1999 consent decree between EPA and the environmental groups. The requirements of the consent decree are nearly complete and 33 of these TMDLs

³⁰ See note 20.

addressing hundreds of waterbody-pollutant combinations covering every coastal watershed in Los Angeles County will be implemented in this Order. The number of TMDLs, and hundreds of water quality issues that the TMDLs address, is unprecedented anywhere else in California. These extensive and enforceable implementation programs for addressing myriad water quality issues throughout the County, coupled with more robust core provision requirements, and commitments to implement watershed solutions to address all impairments in regional waters, allows this Board to consider the compliance mechanisms described below. These compliance mechanisms provide an incentive and robust framework for Permittees to craft comprehensive pathways to achieve compliance with receiving water limitations – both those addressed by TMDLs and those not addressed by TMDLs. This compliance mechanism is contingent upon participating Permittees being in full compliance with all requirements articulated in the permit and approved Watershed Management Program or EWMP in order to take advantage of these provisions.

This Order includes requirements in Part VI.E of this Order to implement WLAs assigned to MS4 discharges from 33 TMDLs. Those TMDLs adopted through the State's basin planning process include programs of implementation pursuant to California Water Code section 13242, including implementation schedules, for attaining water quality standards. The TMDL provisions in Part VI.E and attachments include compliance schedules for TMDLs adopted by the Regional Water Board consistent with the TMDL implementation schedule to achieve the final receiving water limitations. The Regional Water Board recognizes that, in the case of impaired waters subject to a TMDL, the permit's receiving water limitations for the pollutants addressed by the TMDL may be exceeded during the period of TMDL implementation. Therefore, this Order provides, in Part VI.E.2.c, that a Permittee's full compliance with the applicable TMDL requirements pursuant to the compliance schedules in this Order an MS4 constitutes a Permittee's shall not be considered in violation of a compliance with the receiving water limitations provisions in Part V.A. of this Order for the particular pollutant addressed by the TMDL, ~~if the Permittee is in full compliance with the applicable TMDL requirements pursuant to the compliance schedules in this Order.~~

For water body-pollutant combinations not addressed by a TMDL, the Regional Water Board has included provisions in Part VI.C. to allow Permittees to develop a Watershed Management Program or EWMP to address receiving water limitations not otherwise addressed by a TMDL. The Watershed Management Program must include a Reasonable Assurance Analysis (RAA) that is quantitative and performed using a peer-reviewed model in the public domain. Models to be considered for the RAA, without exclusion, are the Watershed Management Modeling System (WMMS), Hydrologic Simulation Program-FORTRAN (HSPF), and the Structural BMP Prioritization and Analysis Tool (SBPAT). The RAA shall commence with assembly of all available, relevant subwatershed data collected within the last 10 years, including land use and pollutant loading data, establishment of quality assurance/quality control (QA/QC) criteria, QA/QC checks of the data, and identification of the data set meeting the criteria for use in the analysis. Data on performance of watershed control measures needed as model input shall be drawn only from peer-reviewed sources. These data shall be statistically analyzed to determine the best estimate of performance and the confidence limits on that estimate for the pollutants to be evaluated. The objective of the RAA shall

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be to demonstrate the ability of Watershed Management Programs and enhanced Watershed Management Programs (where retention of the 85th percentile, 24-hour event is not technically feasible) to ensure that Permittees' MS4 discharges achieve applicable water quality based effluent limitations and do not cause or contribute to exceedances of receiving water limitations.

A Permittee's full compliance with all requirements and dates for their achievement in an approved Watershed Management Program or enhanced Watershed Management Program constitutes compliance with the receiving water limitations provisions in Part V.A. of the Order for the specific water body-pollutant combinations addressed by an approved Watershed Management Program or enhanced Watershed Management Program. However, if a Permittee fails to meet any requirement or date for its achievement beginning with notification of a Permittee's intent to develop a Watershed Management Program or EWMP, and continuing with implementation of ~~in~~ an approved Watershed Management Program or enhanced Watershed Management Program, the Permittee is subject to the provisions of Part V.A. for the waterbody-pollutant combination(s) that were to be addressed by the requirement. Permittees that do not elect to develop a Watershed Management Program or EWMP are required to demonstrate compliance with receiving water limitations pursuant to Part V.A.

VI. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR section 122.42, are provided in Attachment D. Dischargers must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR section 122.42.

B. Watershed Management Programs

The purpose of the Watershed Management Programs is to provide a framework for Permittees to implement the requirements of this Order in an integrated and collaborative fashion to address water quality priorities on a watershed scale, including complying with the requirements of Part V.A. (Receiving Water Limitations), Part VI.E (Total Maximum Daily Load Provisions) and Attachments L through R, by customizing the control measures in Parts III.A.4 (Prohibitions – Non-Storm Water Discharges) and VI.D (Minimum Control Measures). This watershed management paradigm is consistent with federal regulations that support the development of permit conditions, as well as the implementation of storm water management programs, at a watershed scale (40 CFR §§ 122.26(a)(3)(ii), 122.26(a)(3)(v), and 122.26(d)(2)(iv)). USEPA later issued a Watershed-Based NPDES Permitting Policy Statement (USEPA, 2003) that defines watershed-based permitting as an approach that produces NPDES permits that are issued to point sources on a geographic or watershed basis. In this policy statement, USEPA explains that, “[t]he utility of this tool relies heavily on a detailed, integrated, and inclusive watershed planning process.” USEPA identifies a number of important benefits of watershed permitting, including more environmentally effective results; the ability to

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emphasize measuring the effectiveness of targeted actions on improvements in water quality; reduced cost of improving the quality of the nation’s waters; and more effective implementation of watershed plans, including TMDLs, among others.

There are several reasons for this shift in emphasis from Order No. 01-182. A watershed based structure for permit implementation is consistent with TMDLs developed by the Los Angeles Water Board and USEPA, which are established at a watershed or subwatershed scale and are a prominent new part of this Order. Many of the Permittees regulated by this Order have already begun collaborating on a watershed scale to develop monitoring and implementation plans required by TMDLs. Additionally, a watershed based structure comports with the recent amendment to the Los Angeles County Flood Control Act (Assembly Bill 2554 in 2010), which allows the LACFCD to assess a parcel tax for storm water and clean water programs. Funding is subject to voter approval in accordance with Proposition 218. Fifty percent of funding is allocated to nine “watershed authority groups” to implement collaborative water quality improvement plans.

An emphasis on watersheds is appropriate at this stage in the region’s MS4 program to shift the focus of the Permittees from rote program development and implementation to more targeted, water quality driven planning and implementation. Addressing MS4 discharges on a watershed scale focuses on water quality results by emphasizing the receiving waters within the watershed. The conditions of the receiving waters drive management actions, which in turn focus on the measures to address pollutant contributions from MS4 discharges.

The ultimate goal of the Watershed Management Programs is to ensure that discharges from the Los Angeles County MS4: (i) achieve applicable WQBELs that implement TMDLs, (ii) do not cause or contribute to exceedances of receiving water limitations, and (iii) for non-storm water discharges from the MS4, are not a source of pollutants to receiving waters.

After more than 20 years of program implementation, it is critical that the Permittees design and implement their programs based on their improved knowledge of storm water and its impacts on local receiving waters and by employing BMPs and other control measures that have been developed and refined over the past two decades. The Watershed Management Programs are driven by strategic planning and implementation, which will ultimately result in more cost effective implementation. The Watershed Management Programs will provide permittees with the flexibility to prioritize and customize control measures to address the water quality issues specific to the watershed management area (WMA), consistent with federal regulations (40 CFR § 122.26(d)(2)(iv)).

Focusing on watershed implementation does not mean that the Permittees must expend funds outside of their jurisdictions. Rather, the Permittees within each watershed are expected to collaborate to develop a watershed strategy to address the high priority water quality problems within each watershed. They have the option of implementing the strategy in the manner they find to be most effective. Each Permittee can implement

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the strategy individually within its jurisdiction, or the Permittees can group together to implement the strategy throughout the watershed.

While this Order includes a new emphasis on addressing MS4 discharges on a watershed basis, this Order includes recognition of the importance of continued program implementation on jurisdictional levels. This Order also acknowledges that jurisdictional and watershed efforts may be integrated to achieve water quality outcomes.

In this Order, the watershed requirements serve as the mechanism for this program integration. Since jurisdictional activities also serve watershed purposes, such activities can be integrated into the Permittees' watershed management programs. Such opportunities for program integration inherently provide flexibility to the Permittees in implementing their programs. Program integration can be expanded or minimized as the Permittees see fit. Some Permittees may opt to continue jurisdiction-specific implementation for certain programs, while for other program areas more collaborative watershed scale implementation may be more effective. Permittees identify individual roles and responsibilities as part of the Watershed Management Program Plan.

Permittees can customize the BMPs to be implemented, or required to be implemented, for development, construction, and existing development areas. Flexibility to determine which industrial or commercial sites are to be inspected is also provided to the Permittees. Educational approaches are also to be determined by the Permittees under this Order. Significant leeway is also provided to the Permittees in using methods to assess the effectiveness of their various runoff management programs. This flexibility is further extended to the monitoring program requirements, which allow the Permittees to develop monitoring approaches to several aspects of the monitoring program.

The challenge in drafting this Order is to provide the flexibility described above, while ensuring that this Order provides baseline requirements and is still enforceable. To achieve this, this Order frequently prescribes baseline or default requirements, such as for each of the six "minimum control measures" within a Permittee's baseline storm water management program, while providing the Permittees with flexibility to propose customized actions as part of their watershed management program.

Permittees that elect to develop a Watershed Management Program must submit a "Notice of Intent" to the Regional Water Board no later than six months after the effective date of this Order. The Notice of Intent must be signed by all Permittees electing to participate in the Watershed Management Program for the Watershed Management Area. Permittees that do not elect to develop a Watershed Management Program are subject to the baseline storm water management program requirements in this Order and must demonstrate compliance with applicable WQBELs through monitoring data collected from the Permittee's outfall(s).

Permittees electing to develop a Watershed Management Program must submit a draft plan for approval by the Regional Water Board or by the Executive Officer on behalf of the Regional Water Board no later than one year after the effective date of the Order, or if certain conditions are met, no later than 18 months or 30 months after the effective

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date of the Order. To encourage stakeholder involvement in the development of the Watershed Management Programs, the Order requires that the Permittees form a permit-wide technical advisory committee (TAC) that will advise and participate in the development of the Watershed Management Programs. The TAC must include at least one public representative from a non-governmental organization with public membership. Additionally, the Order requires that the draft Watershed Management Programs are made available for public review prior to approval by the Regional Water Board or Executive Officer on behalf of the Regional Water Board.

Each Watershed Management Program must:

1. Prioritize water quality issues resulting from storm water and non-storm water discharges to the MS4 and from the MS4 to receiving waters within each Watershed Management Area,
2. Identify and implement strategies, control measures, and BMPs to achieve applicable water quality based effluent limitations and/or receiving water limitations, consistent with applicable compliance schedules in this Order,
3. Execute an integrated monitoring and assessment program to determine progress towards achieving applicable limitations, and
4. Modify strategies, control measures, and BMPs as necessary based on analysis of monitoring data collected pursuant to the MRP to ensure that applicable water quality-based effluent limitations and receiving water limitations and other milestones set forth in the Watershed Management Program will be achieved.

Watershed Management Programs must be developed using the Regional Water Board’s Watershed Management Areas (see Attachments B and C of this Order). Where appropriate, Watershed Management Areas may be separated into subwatersheds to focus water quality prioritization and implementation efforts by receiving water, or to align Permittee groups with “watershed authority groups” designated in the Los Angeles County Flood Control Act, so long as the Permittees implement all TMDL provisions for which they are identified as a responsible Permittee.

Permittees must identify the water quality priorities within each Watershed Management Area that will be addressed by the Watershed Management Program consistent with 40 CFR section 122.26(d)(2)(iv). At a minimum, these priorities must include achieving applicable water quality based effluent limitations and/or receiving water limitations established pursuant to TMDLs and included in this Order.

Each plan must include an evaluation of existing water quality conditions, including characterization of storm water and non-storm water discharges from the MS4 and receiving water quality, consistent with 40 CFR §§ 122.26(d)(1)(iv) and 122.26(d)(2)(iii), to support identification and prioritization/sequencing of management actions.

On the basis of the evaluation of existing water quality conditions, water body-pollutant combinations must be classified into one of the following three categories:

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- Category 1 (Highest Priority): Water body-pollutant combinations for which water quality based effluent limitations and/or receiving water limitations are included in this Order to implement TMDLs.
- Category 2 (High Priority): Pollutants for which data indicate water quality impairment in the receiving water according to the State’s Listing Policy and for which MS4 discharges may be causing or contributing to the impairment.
- Category 3 (Medium Priority): Pollutants for which there are insufficient data to indicate water quality impairment in the receiving water according to the State’s Listing Policy, but which exceed applicable receiving water limitations contained in this Order and for which MS4 discharges may be causing or contributing to the exceedance.

Utilizing existing information, potential sources within the watershed for the pollutants in Categories 1 and 2 must be identified, consistent with 40 CFR sections 122.26(d)(1)(iii) and 122.26(d)(2)(ii). Permittees must identify known and suspected storm water and non-storm water pollutant sources in discharges to the MS4 and from the MS4 to receiving waters and any other stressors related to MS4 discharges causing or contributing to the highest water quality priorities (Categories 1 and 2).

Based on the findings of the source assessment, the issues within each watershed must be prioritized and sequenced. Factors that must be considered in establishing watershed priorities include:

1. Pollutants for which there are water quality based effluent limitations and/or receiving water limitations with interim or final compliance deadlines within the permit term.
2. Pollutants for which there are water quality based effluent limitations and/or receiving water limitations with interim or final compliance deadlines between October 26, 2012 and October 25, 2017.
3. Pollutants for which data indicate impairment in the receiving water and the findings from the source assessment implicates discharges from the MS4, but no TMDL has been developed.

Permittees must identify strategies, control measures, and BMPs to implement through their jurisdictional storm water management programs, or collectively on a watershed scale, with the goal of creating an efficient program to focus individual and collective resources on watershed priorities.

The following provisions of this Order may be part of the Watershed Control Measures within a Watershed Management Program:

1. Minimum Control Measures. Permittees may assess the minimum control measures (MCMs) as defined in this Order to identify opportunities for focusing resources on the high priority issues in each watershed. For each of the following minimum control measures, Permittees may propose modifications that will achieve equivalent pollutant control given watershed priorities:

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- a. Development Construction Program
 - b. Industrial/Commercial Program
 - c. Illicit Connection/Illicit Discharge Detection and Elimination Program
 - d. Public Agency Activities Program
 - e. Public Information and Participation Program
2. Non-Storm Water Discharge Measures. Where Permittees identify non-storm water discharges from the MS4 as a source of pollutants in the source assessment, the Watershed Control Measures must include strategies, control measures, and/or BMPs that will be implemented to effectively eliminate the source of pollutants. These may include measures to prohibit the non-storm water discharge to the MS4, additional BMPs to reduce pollutants in the non-storm water discharge or conveyed by the non-storm water discharge, or strategies to require the non-storm water discharge to be separately regulated under a general NPDES permit.
3. TMDL Control Measures. Permittees must compile control measures that have been identified in TMDLs and corresponding implementation plans. If not sufficiently identified in previous documents, or if implementation plans have not yet been developed (e.g., EPA promulgated TMDLs), the Permittees must evaluate and identify control measures to achieve water quality based effluent limitations and/or receiving water limitations established in this Order pursuant to these TMDLs.
- a. TMDL control measures must include, where necessary, control measures to address both storm water and non-storm water discharges from the MS4.
 - b. TMDL control measures may include activities covered under the MCMs as well as BMPs and other control measures covered under the non-stormwater discharge provisions of this Order.
 - c. TMDL control measures must include, at a minimum, those actions that will be implemented during the permit term to achieve interim and/or final water quality based effluent limitations and/or receiving water limitations with compliance deadlines within the permit term.

Pursuant to 40 CFR sections 124.8, 124.9, and 124.18, as part of the Watershed Management Program plan, Permittees must conduct a Reasonable Assurance Analysis for each TMDL that consists of an assessment (through quantitative analysis or modeling) to demonstrate that the activities and control measures (i.e. BMPs) identified in the Watershed Control Measures will achieve applicable water quality based effluent limitations and/or receiving water limitations with compliance deadlines during the permit term.

Permittees must incorporate and, where necessary develop, numeric milestones and compliance schedules into the plan consistent with 40 CFR section 122.47(a). Numeric milestones and schedules shall be used to measure progress towards addressing the highest water quality priorities and achieving applicable water quality based effluent limitations and/or receiving water limitations. Where the TMDL Provisions do not include interim or final water quality based effluent limitations and/or receiving water limitations with compliance deadlines during the permit term, Permittees must identify interim numeric milestones and compliance schedules to

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ensure significant progress toward achieving interim and final water quality based effluent limitations and/or receiving water limitations with deadlines beyond the permit term (40 CFR § 122.47(a)(3)).

Schedules must be developed for both the strategies, control measures and BMPs to be implemented by each individual Permittee within its jurisdiction and for those that will be implemented by multiple Permittees on a watershed scale. Schedules must be adequate for measuring progress at least twice during the permit term. Schedules must incorporate the following:

1. Compliance deadlines occurring within the permit term for all applicable interim and/or final water quality based effluent limitations and/or receiving water limitations to implement TMDLs,
2. Interim deadlines and numeric milestones within the permit term for any applicable final water quality based effluent limitation and/or receiving water limitation to implement TMDLs, where deadlines within the permit term are not otherwise specified,
3. For watershed priorities related to addressing exceedances of receiving water limitations in Part V.A and not otherwise addressed by Part VI.E:
 - a. Numeric milestones based on measureable criteria or indicators, to be achieved in the receiving waters and/or MS4 discharges,
 - b. A schedule with interim and final dates for achieving the numeric milestones, and
 - c. Final dates for achieving the receiving water limitations as soon as possible.

Each Permittee must implement the Watershed Management Program immediately after determination by the Regional Water Board Executive Officer that the Watershed Management Program meets the requirements of this Order.

Clean Water Act section 402(a)(2) requires the permitting authority to prescribe conditions for MS4 permits to assure compliance, including conditions on data and information collection, reporting, and such other requirements as appropriate. Consistent with this requirement, Permittees in each Watershed Management Area must develop an integrated program to assess the progress toward achieving the water quality based effluent limitations and/or receiving water limitations per the compliance schedules, and the progress toward addressing the highest water quality priorities for each Watershed Management Area. The integrated watershed monitoring and assessment program may be customized, but must contain the basic elements (receiving water monitoring, storm water outfall monitoring, non-storm water outfall monitoring, new development/re-development effectiveness tracking and regional studies), and achieve the objectives of, the Monitoring and Reporting Program (MRP) (Attachment E of this Order).

Permittees in each Watershed Management Area must implement an adaptive management process, at least twice during the permit term, adapting the Watershed

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Management Program to become more effective, based on, but not limited to the following:

1. Progress toward achieving the outcome of improved water quality in MS4 discharges and receiving waters through implementation of the watershed control measures;
2. Progress toward achieving interim and/or final water quality based effluent limitations and/or receiving water limitations, or other numeric milestones where specified, according to established compliance schedules;
3. Re-evaluation of the highest water quality priorities identified for the Watershed Management Area based on more recent water quality data for discharges from the MS4 and the receiving water(s) and a reassessment of sources of pollutants in MS4 discharges;
4. Availability of new information and data from sources other than the Permittees' monitoring program(s) within the Watershed Management Area that informs the effectiveness of the actions implemented by the Permittees;
5. Regional Water Board recommendations; and
6. Recommendations for modifications to the Watershed Management Program solicited through a public participation process, consistent with 40 CFR section 122.26(d)(2)(iv).

Based on the results of the iterative process, Permittees are required to report any modifications necessary to improve the effectiveness of the Watershed Management Program in the Annual Report, and as part of the Report of Waste Discharge (ROWD). Permittees must implement any modifications to the Watershed Management Program upon acceptance by the Regional Water Board Executive Officer.

C. Storm Water Management Program Minimum Control Measures (MCMs)

1. General Requirements

- a. **Basis for MCMs.** 40 CFR section 122.26(d)(2)(iv) establishes required elements of the Permittees' storm water management program. The previous permit, Order No. 01-182, included six categories of minimum control measures that are considered to be baseline or default requirements for meeting the requirements of 40 CFR section 122.26(d)(2)(iv). These requirements were determined appropriate within Order No. 01-182 and again appropriate for this Order. The minimum control measures require Permittees to implement BMPs that are considered necessary to reduce pollutants in storm water to the MEP and to effectively prohibit non-storm water discharges. In lieu of implementing the MCMs as described in Part VI of this Order, this Order allows for Permittees to develop alternative BMPs to comply with 40 CFR section 122.26(d)(2)(iv), when

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implemented through a Watershed Management Program approved by the Executive Officer of the Regional Water Board.

b. Timelines for Implementation

The timelines for implementation of most MCMs contained in Part VI.D of this Order is provided in Table F-5 below. Where implementation dates for minimum control measures are not provided in the Table, Part VI.D.1.b requires implementation within 6 months of the effective date this Order. Unless otherwise noted in Part VI.D of the Order, each Permittee that does not elect to develop a Watershed Management Program or enhanced Watershed Management Program per Part VI.C must implement the requirements contained in Part VI.D within 6 months after the effective date of this Order. In the interim, a Permittee shall continue to implement its existing storm water management program, including actions within each of the six categories of minimum control measures consistent with 40 CFR section 122.26(d)(2)(iv).

Permittees that elect to develop a Watershed Management Program or enhanced Watershed Management Program shall continue to implement their existing storm water management programs, including actions within each of the six categories of minimum control measures consistent with 40 CFR section 122.26(d)(2)(iv) until the Watershed Management Program or enhanced Watershed Management Program is approved by the Regional Water Board Executive Officer. The Table below denotes the timeframe for requirements as well as the basis of those timeframes. The majority of the timeframes are consistent with Order No. 01-182 as well as other area permits including the Ventura County MS4 Permit and the State Water Board’s Construction General NPDES Permit. The timeframe for notifications, submittals, and attaining compliance with permit requirements are determined to be the earliest practicable periods and ensure timely measures for protection of water quality.

Table F-5. Timeline for the Implementation of Permit Requirements

Part Number	Requirement Summary	Timeframe	Basis for Timeframe
Discharge Prohibitions			
III.A.2.a.ii	Potable Drinking water suppliers must notify MS4 Permittee if intend to discharge to the Permittee’s MS4.	At least 72 hours prior to a planned discharge and as soon as possible after an unplanned discharge.	Allows for advanced notice and sampling, if warranted.
III.A.4.e	If the Permittee determines that any of the authorized or conditionally exempt essential non-storm water discharges identified in Parts III.A.1.a through III.A.1.c, III.A.2.a or III.A.3 is a source of pollutants, notify the Regional Water Board if the non-storm water discharge has coverage under a separate NPDES permit or subject to a Record of Decision (ROD) approved under section 121 of CERCLA, or a conditionally exempt essential non-	Within 30 days of determination.	The language in the previous LA MS4 permit, Order No. 01-182, states “promptly.” The specification of a 30 day deadline is considered reasonable and the earliest practicable deadline to ensure the protection of water quality.

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Part Number	Requirement Summary	Timeframe	Basis for Timeframe
	storm water discharge or emergency non-storm water discharge.		
Table III.A	<u>Dewatering of Lakes</u> – Ensure procedures for advanced notification by the lake owner/operator to the Permittee(s).	At least 72 hours in advance of discharge.	Allows for advanced notice and sampling, if warranted.
Table III.A	<u>Dechlorinated/debrominated swimming pool/spa discharges</u> – Ensure procedures for advanced notification by the pool owner to the Permittee(s) prior to planned discharges of 100,000 gallons or more.	At least 72 hours in advance of discharge.	Allows for advanced notice and sampling, if warranted.
Table III.A	<u>Dewatering of decorative fountains</u> – Ensure procedures for advanced notification by the fountain owner to the Permittee(s) prior to planned discharges of 100,000 gallons or more.	At least 72 hours in advance of discharge.	Allows for advanced notice and sampling, if warranted.
Receiving Water Limitations			
V.A.3.a	Upon determination by either the Permittee or the Regional Water Board that discharges from the MS4 are causing or contributing to an exceedance of an applicable Receiving Water Limitation, the Permittee shall notify the Regional Water Board within 30 days of analytical results and thereafter submit an Integrated Monitoring Compliance Report within the next Annual Report.	Within 30 days of receipt of analytical results from the sampling event.	The language in the current LA MS4 permit reads “promptly.” The specification of a 30 day deadline is considered reasonable and the earliest practicable deadline to ensure the protection of water quality.
V.A.3.b	Submit any modifications to the Integrated Monitoring Compliance Report required by the Regional Water Board	Within 30 days notification from the Regional Water Board.	This is consistent with Order No. 01-182
V.A.3.c	Permittee shall revise its control measures and monitoring program to incorporate the improved modified BMPs that will be implemented, an implementation schedule, and any additional monitoring required.	Within 30 days following Regional Water Board Executive Officer’s approval of the Integrated Monitoring Report.	Allows for adequate time to make modifications.
Provisions			
VI.A.2.j	Discharger shall file with the Regional Water Board a report of waste discharge before making any material change or proposed change in the character, location, or volume of the discharge.	At least 120 days prior to any change.	Standard language.
Special Provisions: Watershed Management Programs			
VI.C.2.b	Permittees that elect to develop a Watershed Management Program must notify the Regional Water Board.	No later than 6 months after the date this Order is adopted.	This provides a reasonable amount of time to determine participation in a WMP, but also ensure

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Part Number	Requirement Summary	Timeframe	Basis for Timeframe
			adequate time for implementation of watershed scale control measures during the term of this Order.
VI.C.2.c	Permittees that elect to develop a Watershed Management Program shall submit a draft plan to the Regional Water Board Executive Officer.	No later than 18 months after the date this Order is adopted.	This provides a reasonable amount of time to complete the plan but also ensure effective monitoring during the term of this Order.
VI.C.6.a.i	Permittees in each Watershed Management Area shall implement an adaptive management process adapting the Watershed Management Program to become more effective.	At least twice during the permit term.	This encourages application of the iterative approach.
VI.C.6.b.i	Permittees in the Watershed Management Area shall implement the adaptive management process with regard to its jurisdictional storm water management program to improve its effectiveness.	At least annually.	This encourages application of the iterative approach.
Special Provisions: Minimum Control Measures			
VI.D.2.a.i	<u>Progressive Enforcement and Interagency Coordination</u> – In the event that a Permittee determines that a facility or site operator has failed to adequately implement all necessary BMPs, that Permittee shall take progressive enforcement which shall include a follow-up inspection.	Follow-up inspection within 4 weeks from the date of the initial inspection and/or investigation.	This is consistent with the current LA MS4 permit.
VI.D.2.b	<u>Progressive Enforcement and Interagency Coordination</u> – Each Permittee shall initiate investigation of complaints from facilities within its jurisdiction.	Initiate investigation within one business day of complaint.	This is consistent with Order No. 01-182.
VI.D.5.b.ii	<u>Public Information and Participation Program</u> – If participating in a County-wide or Watershed Group PIPP, provide contact information for their appropriate staff responsible for storm water public education activities to the designated PIPP coordinator and contact information changes.	No later than 30 days after a change occurs.	This is consistent with Order No. 01-182 for contact changes, which directs contact changes be sent to Los Angeles County by May 1, 2002. However, with the elimination of the Principal Permittee in this Order, it is more appropriate to direct any contact information changes directly to the PIPP coordinator.
VI.D.6.b.iii	<u>Industrial/Commercial Business Program</u> – Each Permittee shall update its inventory of critical sources.	Update at least annually.	Business turn-over can be significant thus an active inventory is required.
VI.D.6.c.i	<u>Industrial/Commercial Business</u>	Notify at least once	This is required so that the

Part Number	Requirement Summary	Timeframe	Basis for Timeframe
	<u>Program</u> – Each Permittee shall notify the owner/operator of each of its inventoried commercial and industrial sites identified in Part VI.D.5.b of this Order of the BMP requirements applicable.	during the five-year period of this Order.	owner/operator remains informed and vigilant about BMP implementation.
VI.D.6.d.i	<u>Industrial/Commercial Business Program</u> – Each Permittee shall inspect all commercial facilities identified in Part VI.D.5.b of this Order twice during the 5-year term of this Order with a minimum interval of 6 months between the first and second mandatory compliance inspection required.	Provided that the first mandatory compliance inspection occurs no later than 2 years after the date this Order is adopted.	Order No. 01-182 required initial implementation by August 2004 (or a little over 2.5 years), however the 2 year requirement contained in this Order is considered reasonable and the earliest practicable deadline to ensure the protection of water quality.
VI.D.6.e.i.(1)	<u>Industrial/Commercial Business Program</u> – Each Permittee shall perform an initial compliance inspection of all industrial facilities identified in Part VI.D.5.b.of this Order	No later than 2 years after the date this Order is adopted.	Order No. 01-182 required initial implementation by August 2004 (or a little over 2.5 years). However, the 2 year requirement contained in this Order is considered reasonable and the earliest practicable deadline to ensure the protection of water quality.
VI.D.6.e.i.(2)	<u>Industrial/Commercial Business Program</u> – Each Permittee shall review the State Water Board’s Storm Water Multiple Application and Report Tracking System (SMARTS) database at defined intervals to determine if an industrial facility has been recently inspected by the Regional Water Board. The Permittee does not need to inspect the facility if it is determined that the Regional Water Board conducted an inspection of the facility within the prior 24 month period.	The first interval shall occur approximately 2 years after the date this Order is adopted. The second interval shall occur approximately 4 years after the date this Order is adopted.	This specific requirement for inspecting facilities within certain intervals is a new requirement, but is considered consistent with Order No. 01-182.
VI.D.6.e.i.(3)	<u>Industrial/Commercial Business Program</u> – Each Permittee shall evaluate its inventory of industrial facilities and perform a second mandatory compliance inspection at a minimum of 25% of the facilities identified to have filed a No Exposure Certification.	Approximately 3 to 4 years after the date this Order is adopted.	This is consistent Order No. 01-182.
VI.D.7.c.iii.(5).(f)	<u>Planning and Land Development Program</u> – Each Permittee shall develop a schedule for the completion of offsite projects, including milestone dates to identify, fund, design, and construct the projects.	Offsite projects shall be completed as soon as possible, and at the latest within 4 years of the certificate of occupancy for the first project that contributed funds toward the construction of the	This requirement is consistent with the provisions contained in the Ventura County Redevelopment Project Area Master Plan (RPAMP).

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Part Number	Requirement Summary	Timeframe	Basis for Timeframe
		offsite project.	
VI.D.7.d.iv.(1).(c)	<u>Planning and Land Development Program</u> – Each Permittee shall maintain a database providing key information for each new development/re-development subject to the requirements of Part VI.D.6 of this Order.	Each Permittee shall implement a tracking system and an inspection and enforcement program for new development and redevelopment post-construction storm water no later than 60 days after Order adoption date.	Effectiveness tracking of the treatment system is warranted and will also help to ensure adequate maintenance.
VI.D.7.d.i	<u>Planning and Land Development Program</u> – A local LID ordinance that fully incorporated the applicable requirements of this Order shall be submitted to the Executive Officer of the Regional Water Board for approval.	Within 180 days after the date this Order is adopted.	The requirement is deemed acceptable due to the large number of existing LID ordinances within the Permittees and the varied number of templates available nationally.
VI.D.7.d.iii.(1).(a) . (ii)	<u>Planning and Land Development Program</u> – Written conditions in the sales or lease agreement, which require the property owner or tenant to assume responsibility for BMP maintenance and conduct a maintenance inspection.	At least once a year.	This is consistent with the current Ventura County MS4 permit.
VI.D.7.d.iv	<u>Planning and Land Development Program</u> – Each Permittee shall implement a tracking system and an inspection and enforcement program from new development and redevelopment post-construction storm water BMPs.	No later than 60 days after the date this Order is adopted.	A tracking system is deemed critical to the success of this MCM. Additionally, a tracking system need not be complex and can, and has, been developed using spreadsheets or equivalent.
VI.D.7.d.iv.(1).(c) . (ii)	<u>Planning and Land Development Program</u> – Inspection of post-construction BMPs to assess operation conditions with particular attention to criteria and procedures for post-construction treatment control and hydromodification control BMP repair, replacement, or re-vegetation.	Inspection at least once every 2 years after project completion.	This is consistent with the current Ventura County MS4 permit.
VI.D.8.j.ii.(1)	<u>Development Construction Program</u> – Inspect public and private construction sites 1 acre or larger that discharge to a tributary listed by the state as an impaired water for sediment or turbidity under CWA § 303(d).	When two or more consecutive days with greater than 50% chance of rainfall are predicted by NOAA, within 48 hours of a ½-inch rain event, and at least once every two weeks.	This requirement is consistent with the current State Water Board's General NPDES Construction Permit Requirements.
VI.D.8.j.ii.(1)	<u>Development Construction Program</u> – Inspect public and private construction sites 1 acre or larger determined to be a significant threat to water quality.	When two or more consecutive days with greater than 50% chance of rainfall are predicted by NOAA, within 48 hours of	This requirement is consistent with the current State Water Board's General NPDES Construction Permit

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Part Number	Requirement Summary	Timeframe	Basis for Timeframe
		a 1/2-inch rain event, and at least once every two weeks.	Requirements.
VI.D.8.j.ii.(1)	<u>Development Construction Program</u> – Inspect public and private construction sites 1 acre or larger that do not meet other criteria in Part VI.D.7.j.ii.(1) of this Order.	At least monthly.	This requirement is consistent with the current General Construction Permit Requirements.
VI.D.9.c.iii	<u>Public Agency Activities Program</u> – Each Permittee shall update its facility inventory.	At least once during the term of this Order.	This requirement is deemed reasonable because site conditions can change at existing facilities.
VI.D.9.h.iii.(2)	<u>Public Agency Activities Program</u> – In areas that are not subject to a trash TMDL, each Permittee shall inspect Priority A catch basins.	A minimum of 3 times during the wet season (October 1 through April 15) and once during the dry season every year.	This is consistent with Order No. 01-182.
VI.D.9.h.iii.(2)	<u>Public Agency Activities Program</u> – In areas that are not subject to a trash TMDL, each Permittee shall inspect Priority B catch basins.	A minimum of once during the wet season and once during the dry season every year.	This is consistent with Order No. 01-182.
VI.D.9.h.iii.(2)	<u>Public Agency Activities Program</u> – In areas that are not subject to a trash TMDL, each Permittee shall inspect Priority C catch basins.	A minimum of once per year.	This is consistent with Order No. 01-182.
VI.D.9.h.iv.(1).(c)	<u>Public Agency Activities Program</u> – Provide clean out of catch basins, trash receptacles, and grounds in the event area.	Within one business day subsequent to the event.	This is consistent with the current Ventura County MS4 permit.
VI.D.8.h.vi.(2)	<u>Public Agency Activities Program</u> – Each Permittee shall inspect the legibility of the stencil or label nearest each inlet.	Prior to the wet season every year.	This is consistent with Order No. 01-182.
VI.D.9.h.vi.(3)	<u>Public Agency Activities Program</u> – Each Permittee shall record all catch basins with illegible stencils and re-stencil or re-label.	Within 180 days of inspection.	This is consistent with Order No. 01-182.
VI.D.9.h.vii.(1)	<u>Public Agency Activities Program</u> – In areas that are not subject to a trash TMDL, each Permittee shall install trash excluders, or equivalent devices, on or in catch basins or outfalls, except at sites where the application of such BMPs alone will cause flooding.	No later than 4 years after the date this Order is adopted in areas specified as Priority A.	This is based on the current Ventura County MS4 permit, but due to the significant number of catch basins in Los Angeles County compared to Ventura County the time frame was lengthened.
VI.D.9.h.viii.(1)	<u>Public Agency Activities Program</u> – Visual monitoring of Permittee-owned open channels and other drainage structures, including debris basins, for debris.	At least annually.	This is consistent with Order No. 01-182.
VI.D.9.h.viii.(2)	<u>Public Agency Activities Program</u> – Removal of trash and debris from open channels.	A minimum of once per year before the wet season.	This is consistent with Order No. 01-182.
VI.D.9.i.ii	<u>Public Agency Activities Program</u> –	Swept at least two times	This is consistent with

Part Number	Requirement Summary	Timeframe	Basis for Timeframe
	Each Permittee shall perform street sweeping of curbed streets for Priority A areas.	per month.	Order No. 01-182.
VI.D.9.i.ii	<u>Public Agency Activities Program</u> – Each Permittee shall perform street sweeping of curbed streets for Priority B areas.	Swept at least once per month.	This is consistent with Order No. 01-182.
VI.D.9.i.ii	<u>Public Agency Activities Program</u> – Each Permittee shall perform street sweeping of curbed streets for Priority C areas.	Swept as necessary but in no case less than once per year.	This is consistent with Order No. 01-182.
VI.D.9.i.iv.(1)	<u>Public Agency Activities Program</u> – Permittee-owned parking lots exposed to storm water shall be kept clear of debris and excessive oil buildup and cleaned.	No less than 2 times per month and/or inspected no less than 2 times per month to determine if cleaning is necessary. In no case shall a Permittee-owned parking lot be cleaned less than once a month.	This is consistent with Order No. 01-182.
VI.D.9.j.i.(2)	<u>Public Agency Activities Program</u> – Where the self-waiver has been invoked, the Permittee shall submit to the Regional Water Board Executive Officer a statement of the occurrence of the emergency, an explanation of the circumstances, and the measures that were implemented to reduce the threat to water quality.	No later than 30 business days after the situation of emergency has passed.	This is consistent with the current Ventura County MS4 permit.
VI.D.9.k.i	<u>Public Agency Activities Program</u> – Each Permittee shall train or ensure training of all of their employees and contractors in targeted positions on the requirements of the overall storm water management program.	No later than 1 year after the date this Order is adopted and annually thereafter before June 30.	Order No. 01-182 allowed for this to be initially completed by August 2002. However, since this implementation of this requirement is continuing from the previous LA MS4 permit, implementation within a year is considered reasonable and the earliest practicable period for implementation. This is consistent with Order No. 01-182 and the current Ventura County MS4 permit.
VI.D.9.k.ii	<u>Public Agency Activities Program</u> – Each Permittee shall train all of their employees and contractors or ensure training for all who use or have the potential to use pesticides or fertilizers.	No later than 1 year after the date this Order is adopted and annually thereafter before June 30.	This is consistent with the current Ventura County MS4 permit.
VI.D.10.b.ii	<u>Illicit Connections and Illicit Discharges Elimination Program</u> – Each Permittee shall initiate investigation(s) to identify and	Within 72 hours of becoming aware of the illicit discharge.	Order No. 01-182 and the current Ventura County MS4 permit require illicit discharge investigations

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Part Number	Requirement Summary	Timeframe	Basis for Timeframe
	locate the source of an illicit discharge.		be initiated within 1 business day. However, the 72 hour requirement takes into account the possibility of weekend spills.
VI.D.10.b.iv.(2)	<u>Illicit Connections and Illicit Discharges Elimination Program</u> – If the source of the illicit discharge has been determined to originate within an upstream jurisdiction, the Permittee shall notify the upstream jurisdiction and the Regional Water Board.	Within 30 days of such determination.	This ensures the ID is addressed in a reasonable period of time by the upstream jurisdiction.
VI.D.10.b.v	<u>Illicit Connections and Illicit Discharges Elimination Program</u> – In the event the Permittee is unable to eliminate an ongoing illicit discharge following full execution of its legal authority and in accordance with its Progressive Enforcement Policy, or other circumstances prevent the full elimination of an ongoing illicit discharge, the Permittee shall work with the Regional Water Board to provide a diversion of the entire flow to the sanitary sewer or provide treatment.	Notify the Regional Water Board within 30 days of such determination and provide a written plan for review and comment.	This ensures the Regional Water Board is effectively engaged in the ultimate disposition of ongoing illicit discharges.
VI.D.10.c.ii	<u>Illicit Connections and Illicit Discharges Elimination Program</u> – Each Permittee, upon discovery or upon receiving a report of a suspected illicit connection, shall initiate an investigation.	Initiate investigation within 21 days of discovery.	This is consistent with Order No. 01-182 and the current Ventura County MS4 permit.
VI.D.10.c.iii.(2)	<u>Illicit Connections and Illicit Discharges Elimination Program</u> – Each Permittee, upon confirmation of an illicit MS4 connection, shall ensure that the connection is eliminated.	Within 180 days of completion of the investigation.	This is consistent with Order No. 01-182 and the current Ventura County MS4 permit.
VI.D.10.e.i.(2)	<u>Illicit Connections and Illicit Discharges Elimination Program</u> – Initiate investigation of all public and employee illicit discharge and spill complaints.	Within 1 business day of receiving the complaint.	This is consistent with Order No. 01-182 and the current Ventura County MS4 permit.
VI.D.10.e.i.(3)	<u>Illicit Connections and Illicit Discharges Elimination Program</u> – Response to spills for containment.	Within 4 hours of becoming aware of the spill, except where such spills occur on private property, in which case should be within 2 hours of gaining legal access to the property.	The requirement that spills be responded to within 4 hours of becoming aware of the spill, except where such spills occur on private property, in which case should be within 2 hours of gaining legal access to the property is the earliest practicable period for implementation and

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			ensures the protection of water quality.
VI.D.10.f.iv	<u>Illicit Connections and Illicit Discharges Elimination Program</u> – Each Permittee must create a list of applicable staff and contractors which require IC/ID training and ensure that training is provided.	At least twice during the term of this Order.	This requirement is new and twice during the term of this Order is considered reasonable and the earliest practicable period for implementation.
VI.D.10.f.v	<u>Illicit Connections and Illicit Discharges Elimination Program</u> – New Permittee staff members must be provided with IC/ID training.	Within 180 days of starting employment.	The current Ventura MS4 permit specifies that within 1 year all employees must be trained. However, the requirement that employees be trained within 180 days of starting employment is the earliest practicable period for implementation and ensures the protection of water quality.

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2. Progressive Enforcement

Progressive enforcement is a series of defined and reproducible enforcement actions whereby consequences of non-compliance increase with each incremental enforcement steps. Progressive enforcement includes procedures to coordinate enforcement between the Regional Water Board and Permittees. As the Regional Water Board is the agency responsible for implementing the NPDES program, it has the authority to step in when enforcement actions of Permittee are unsuccessful in bringing dischargers into compliance with the permit. As such, progressive enforcement is an effective strategy to achieve timely compliance with permit requirements. Order No. 01-182 included requirements for a progressive enforcement strategy that are carried over to this Order, with some modifications. This Order includes supplemental documentation requirements for site acreage and Risk Factor rating, when making a referral to the Regional Water Board for MS4 permit non-compliance of a discharger under the construction general permit. This requirement is necessary information for the Regional Water Board consideration. Moreover, this Order eliminates the provision within Order No. 01-182 that allows the Regional Water Board and Permittees to form a storm water task force. This provision was removed because the ability for coordinated enforcement between the Regional Water Board and Permittees is adequately established through remaining provisions within Part VI.D.2 of this Order.

3. Modifications/Revisions

This Order requires each Permittee to modify its storm water management programs, protocols, practices, and municipal codes to be consistent with this Order. This provision is necessary to ensure that each Permittee takes all the steps necessary to update the core and ancillary programs that are required to ensure compliance with this Order. A significant change from Order No. 01-182 is that this

obligation now rests with each individual Permittee rather than the Principal Permittee.

4. Public Information and Participation Program

a. Legal Authority

NPDES regulation 40 CFR section 122.26(d)(2)(iv)(A)(6) provides that the proposed management program include "A description of a program to reduce to the maximum extent practicable, pollutants in discharges from MS4s associated with the application of pesticides, herbicides, and fertilizer which will include, as appropriate, controls such as educational activities, permits, certifications, and other measures for commercial applicators and distributors, and controls for application in public right-of-ways and at municipal facilities."

NPDES regulation 40 CFR section 122.26(d)(2)(iv)(B)(6) provides that the proposed management program include " A description of education activities, public information activities, and other appropriate activities to facilitate the proper management and disposal of used oil and toxic materials."

To satisfy the Public Education and Outreach minimum control measure, the Permittees need to implement a Public Information and Participation Program (PIPP) that has the following objectives: (1) measurably increase the knowledge of the target audiences about the MS4, the adverse impacts of storm water pollution of receiving waters and potential solutions to mitigate the impacts, (2) measurably change the waste disposal and storm water pollution generation behavior of target audiences by developing and encouraging implementation of appropriate activities, and (3) involve and engage a diversity of socio-economic groups and ethnic communities in Los Angeles County to participate in mitigating the impacts of storm water pollution.

b. Background

Implementation of a PIPP is a critical BMP and a necessary component of a storm water management program. The State Water Board Technical Advisory Committee "recognizes that education with an emphasis on pollution prevention is the fundamental basis for solving nonpoint source pollution problems." The USEPA Phase II Fact Sheet 2.3 (Fact Sheet 2.3) finds that "An informed and knowledgeable community is critical to the success of a storm water management program since it helps insure the following: (i) greater support for the program as the public gains a greater understanding of the reasons why it is necessary and important, and (ii) greater compliance with the program as the public becomes aware of the personal responsibilities expected of them and others in the community, including the individual actions they can take to protect or improve the quality of area waters."³¹

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³¹ Storm Water Phase II Final Rule - Public Education and Outreach Minimum Control Measure. USEPA Fact Sheet 2.3, January 2000.

Furthermore, the public can provide valuable input and assistance to a municipal storm water management program and, therefore, should play an active role in the development and implementation of the program. An active and involved community is essential to the success of a storm water management program because it allows for:

- Broader public support since residents who participate in the development and decision making process are partially responsible for the program and, therefore, are more likely to take an active role in its implementation;
- Shorter implementation schedules due to fewer obstacles in the form of public and legal challenges and increased sources in the form of residents volunteers;
- A broader base of expertise and economic benefits since the community can be a valuable, and free, intellectual resource; and
- A conduit to other programs as residents involved in the storm water program development process make important cross-connections and relationships with other community and government programs. This benefit is particularly valuable when trying to implement a storm water program on a watershed basis.

c. PIPP Implementation

It is generally more cost-effective to have numerous operators coordinate to use an existing program than each developing its own local programs. Therefore, Permittees are encouraged to participate in a County-wide PIPP or in one or more Watershed Group sponsored PIPPs supplemented with additional information specific to local needs.

Permittees are required to: (a) conduct storm water pollution prevention public service announcements and advertising campaigns; (b) provide public education materials on the proper handling or potential storm water pollutants; (c) distribute activity specific storm water pollution prevention public education materials to points of purchase; (d) maintain storm water websites or provide links to storm water websites via the Permittees website, which contain educational material and opportunities for the public to participate in storm water pollution prevention and clean-up activities; and (e) provide independent, parochial, and public schools within each Permittee’s jurisdiction with materials, including, but not limited to videos, live presentations, and other information. Permittees are required to use effective strategies to educate and involve ethnic communities using culturally effective methods.

The intent of these changes is to provide an increase in public knowledge of storm water pollution prevention practices in an effective and cost efficient manner, while still providing flexibility for the Permittees to implement the requirements on a watershed group basis.

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The Order requires outreach to ethnically diverse communities using culturally effective strategies. The USEPA, Tailoring Outreach Programs to Minority and Disadvantaged Communities and Children Fact Sheet finds that, "many residents of ethnically and culturally diverse communities don't speak English. English messages contained in public education outreach materials may not be effectively reaching a significant portion of some communities. The intent of this provision is to encourage behavior changes that reduce pollutants in storm water to a portion of the population who might otherwise be overlooked.

5. Industrial/Commercial Business Program

a. Legal Authority

The Phase I regulations require, in part, that the applicant: (i) develop adequate legal authority, (ii) perform a source identification, and (iii) develop a management program to reduce the discharge of pollutants to the MEP using management practices, control techniques and system design and engineering methods, and such other provisions which are appropriate. Specifically, with regards to industrial controls, the management plan shall include the following.

“A description of a program to monitor and control pollutants in storm water discharges to municipal systems from municipal landfills, hazardous waste treatment, disposal and recovery facilities, industrial facilities that are subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA), and industrial facilities that the municipal permit applicant determines are contributing a substantial pollutant loading to the municipal storm sewer system. The program shall:

- i. Identify priorities and procedures for inspections and establishing and implementing control measures for such discharges.
- ii. Describe a monitoring program for storm water discharges associated with industrial facilities [...].”

(40 CFR section 122.26(d)(2)(iv)(C))

The provisions contained in this Order pertaining to the inspection and facility control program requirements for industrial and commercial facilities, as well as construction sites (as discussed below in Part VI.7.b.) are also based on the requirements found in the previous permit, Order No. 01-182. Those requirements, among others, were the subject of litigation between several permittees and the Regional Water Board. In that case, the Los Angeles County Superior Court upheld the inspection and facility control program requirements for industrial/commercial facilities and construction sites in Order No. 01-182. The Court determined that “[t]he Permit contains reasonable inspection requirements for these types of facilities. [Citation.] The Permit requires each permittees to confirm that operators of these facilities have a current waste discharge identification number and is effectively implementing Best Management Practices (BMPs) in compliance with County and municipal

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ordinances, Regional Board Resolution 90-08 and the Stormwater Quality Management Plans (SQMPs). [Citation.] Addressing pollution after it has entered the storm sewer system is not working to meet legislative goals. More work is required at the source of pollution, and that is partially the basis on which this Court finds that the Permit's inspection requirements are reasonable, and not onerous and burdensome." (*In re L.A. Cnty. Mun. Storm Water Permit Litig.* ((L.A. Super. Ct., No. BS 080548, Mar. 24, 2005), Statement of Decision from Phase II Trial on Petitions for Writ of Mandate, p. 17.)

The Court also addressed the permittees' claims that the requirements in Order No. 01-182 shifted the Regional Water Board's inspection responsibility under State Water Board issued general NPDES permits for these types of facilities onto the local agencies. The Court disagreed, stating: "The Court agrees with [the Regional Water Board] and Intervenor that the United States EPA considered obligations under state-issued general permits to be separate and distinct. Despite the similarity between the general permits and the local storm water ordinances, both must be enforced. [Citations.] EPA requires permittees to conduct inspections of commercial and industrial facilities, as well as of construction sites. [Citation.]....This Court finds that the state-issued general permits do not preempt local enforcement of local storm water ordinances. (See State Board Order No. 99-08, [citation].) [¶] Therefore, this Court finds that requiring permittees to inspect commercial and industrial facilities and construction sites is authorized under the Clean Water Act, and both the Regional Board and the municipal permittees or the local government entities have concurrent roles in enforcing the industrial, construction and municipal permits. The Court finds that the Regional Board did not shift its inspection responsibilities to Petitioners. [¶] ... The Court further notes that the Permit issued to local entities, who are Petitioners here, does not refer to any inspection obligations related to state-issued permits. [Citation.] There is no duplication of efforts and no shifting of inspection responsibility in derogation of the Regional Board's responsibility here. The Regional Board is not giving up its won responsibilities, and there is nothing arbitrary or capricious about the Permit's inspection provisions." (*Id.* at 17-18.)

It is also important to note that similar controls for industrial/commercial facilities and construction sites, including inspection activities, required by this Order were also required in the 2002 San Bernardino County MS4 permit issued by the Santa Ana Regional Water Quality Control Board (Santa Ana Regional Water Board). Like Order No. 01-182, that permit was also subject to litigation. In that case, the City of Rancho Cucamonga claimed that the Santa Ana Regional Water Board improperly delegated to it and other permittees the inspection duties of the State and Regional Water Boards and that it was being required to conduct inspections for facilities covered by other state-issued general NPDES permits. (*City of Rancho Cucamonga v. Regional Water Quality Control Board- Santa Ana Region* (2006) 135 Cal.App.4th 1377, 1389.) Like the Los Angeles County Superior Court, the California Court of Appeal rejected this argument. The Court of Appeal upheld the Santa Ana Regional Water Board's requirements, finding that "Rancho Cucamonga and the other permittees are responsible for inspecting

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construction and industrial sites and commercial facilities within their jurisdiction for compliance with and enforcement of local municipal ordinances and permits. But the Regional Board continues to be responsible under the 2002 NPDES permit for inspections under the general permits. The Regional Board may conduct its own inspections but permittees must still enforce their own laws at these sites. (40 C.F.R. § 122.26, subd. (d)(2) (2005).) (*Id.* at 1390.)

b. Background

Municipalities are required to control the storm water discharges associated with industrial activities and other commercial facilities identified as significant contributors of pollutants through the implementation of a mandatory baseline minimum set of source control BMPs; performance of an inspection program to verify the adequacy of BMPs implementation in the field and compliance with the municipal ordinances; and assist the Regional Water Board in ensuring that industrial activities subject to regulations are covered by the general industrial stormwater permit. Regional Water Board will also assist the municipalities in case of instances of egregious non-compliance with the municipal ordinances and state and federal laws and regulations.

The municipality is ultimately responsible for discharges from the MS4. Because industrial awareness of the program may not be complete, there may be facilities within the MS4 area that should be permitted under an industrial storm water permit but are not (non-filers). In addition, the Phase I regulations that require industries to obtain permit coverage for storm water discharges is largely based on Standard Industry Classification (SIC) Code. This has been shown to be incomplete in identifying industries that may be significant sources of storm water pollution ("industries" includes commercial businesses). The word "industries" is used in a broad sense. Another concern is that the permitting authority may not have adequate resources to provide the necessary oversight of permitted facilities. Therefore, it is in the municipality's best interest to assess the specific situation and implement an industrial/commercial inspection/site visit and enforcement program to control the contribution of pollutants to the MS4 from all high risk sources.

In the preamble to the 1990 regulations, USEPA clearly states the intended strategy for discharges of storm water associated with industrial activity:

"...Municipal operators of large and medium municipal separate storm sewer systems are responsible for obtaining system-wide or area permits for their system's discharges. These permits are expected to require that controls be placed on storm water discharges associated with industrial activity which discharge through the municipal system." The USEPA also notes in the preamble that "... municipalities will be required to meet the terms of their permits related to industrial dischargers."

Similarly, in the USEPA's Guidance Manual (Chapter 3.0), USEPA specified that MS4 applicants must demonstrate that they possess adequate legal authority to:

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- i. Control construction site and other industrial discharges to MS4s;
- ii. Prohibit illicit discharges and control spills and dumping;
- iii. Carry out inspection, surveillance, and monitoring procedures.

The document goes on to explain that "control," in this context means not only to require disclosure of information, but also to limit, discourage, or terminate a storm water discharge to the MS4. Further, to satisfy its permit conditions, a municipality may need to impose additional requirements on discharges from permitted industrial facilities, as well as discharges from industrial facilities and construction sites not required to obtain permits.

In the same Guidance Manual (Chapter 6.3.3), USEPA states that the municipality is ultimately responsible for discharges from their MS4. Consequently, the MS4 applicant must describe how the municipality will help the USEPA and authorized NPDES States to:

- i. Identify priority industries discharging to their systems;
- ii. Review and evaluate storm water pollution prevention plans (SWPPPs) and other procedures that industrial facilities must develop under general or individual permits;
- iii. Establish and implement BMPs to reduce pollutants from these industrial facilities (or require industry to implement them); and
- iv. Inspect and monitor industrial facilities discharging storm water to the municipal systems to ensure these facilities are in compliance with their NPDES storm water permit, if required.

c. Industrial/Commercial Business Program Implementation

The requirements in this Order clarify the scope and frequency of inspections. For commercial facilities, in general, frequencies have been modified to require inspections of a facility twice during the five year permit term provided that the first mandatory compliance inspection takes place no later than two years after the date this Order is adopted with a minimum interval of six months between the first and second inspection. The scope of the inspections for each of the facility types was clarified by specifying in tables what BMPs should be implemented at that facility to ensure that pollutant generating activity does not occur. The tables include a range of BMPs that are anticipated to be needed at select industrial and commercial facilities. The BMP categories are based on BMPs identified in the 2003 California Stormwater BMP Handbook, Industrial and Commercial as well as BMPs identified in Regional Water Board Resolution No. 98-08.

For industrial facilities, an initial mandatory compliance inspection must be completed at all industrial facilities no later than 2 years after the date this Order is adopted. If after the initial inspection, the facility was determined to as having exposure of industrial activities to storm water then the permit requires a second mandatory compliance inspection with a minimum interval of 6 months between the first and second mandatory compliance inspection. For facilities determined

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not to have exposure of industrial activities to storm water during the initial inspection, Permittees must conduct second compliance inspections yearly at a minimum of 20% of the facilities.

A provision was added to the Order relieving Permittees of the responsibility to inspect industrial facilities that the Regional Water Board has inspected within the previous 24 months.

In regards to the level of inspection, this Order clarifies that the Permittees are expected to check during inspections for a current Waste Discharge Identification (WDID) number for facilities discharging storm water associated with industrial activity, and that a SWPPP is available on site or that the owner/operator of the facility has applied for and has a current No Exposure Certification (and WDID number). In addition Permittees are expected to check during inspections for compliance with the implementation of minimum BMPs, as previously approved by Board Order 98-08, and compliance with the local storm water ordinances.

The inspection requirements in this Order provide greater clarification concerning the scope of enforcement. A progressive enforcement procedure was outlined including minimum steps that Permittees must take in their program to enforce their municipalities' storm water requirements. In recognition of some of the Permittees concerns regarding the resource intensive efforts needed to elevate enforcement actions, a mechanism was provided through which Permittees can refer cases to the Regional Water Board, and for violations of the State Water Board's General Industrial Activities Storm Water NPDES permit, the referral can be expedited, referral can occur after a single inspection and one written notice rather than referral after two inspections and two written notices.

6. Planning and Land Development Program

a. Legal Authority

The permit application requirements described in 40 CFR section 122.26(d) have formed the basis for MS4 permits and remain applicable as elements in a storm water management program. ~~40-CFR-section-Section~~ 122.26(d)(2)(iv); requires in part, that the large and medium MS4 ~~system~~-applicant develop a management plan~~program~~. Specifically, with regards to planning and land development and post-construction controls, the management plan~~program~~ shall include the following:

“(A) A description of structural and source control measures to reduce pollutants from runoff from commercial and residential areas that are discharged from the municipal storm sewer system that are to be implemented during the life of the permit, accompanied with an estimate of the expected reduction of pollutant loads and a proposed schedule for implementing such controls. At a minimum, the description shall include:

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(1) A description of maintenance activities and a maintenance schedule for structural controls to reduce pollutants (including floatables) in discharges from municipal separate storm sewers;

(2) A description of planning procedures including a comprehensive master plan to develop, implement and enforce controls to reduce the discharge of pollutants from municipal separate storm sewers which receive discharges from areas of new development and significant redevelopment. Such plan shall address controls to reduce pollutants in discharges from municipal separate storm sewers after construction is completed.

(3) A description of practices for operating and maintaining public streets, roads and highways and procedures for reducing the impact on receiving waters of discharges from municipal storm sewer systems

(4) A description of procedures to assure that flood management projects assess the impacts on the water quality of receiving water bodies and that existing structural flood control devices have been evaluated to determine if retrofitting the device to provide additional pollutant removal from storm water is feasible.”

b. Background

Land development and urbanization have been linked to the impairment of aquatic life beneficial uses in numerous studies. Poorly planned new developments and re-development have the potential to impact the hydrology of the watershed and the water quality of the surface waters. Development without proper controls, often result in increased soil compaction, changes in vegetation and increased impervious surfaces. These conditions may lead to a reduction in groundwater recharge and changes in the flow regime of the surface water drainages. Historically, urban development has resulted in increased peak stream flows and flow duration, reduced base flows, and increased water temperatures. Pollutant loading in storm water runoff often increases due to post-construction use and because the storm water runoff is directly connected to the storm drain system or to the surface water body, without the benefit of filtration through soil and vegetation.

In a natural water body (i.e., a water body that has not been armored for flood control or channel stability), increased peak flows and flow duration can cause stream bank erosion, changes in channel geomorphology and bed sediment composition and stability.

When development infringes upon natural riparian buffers, the additional impacts may include further stream bank instability, increased nitrogen loadings to the water body—which would have been intercepted by native riparian vegetation, loss of shading resulting in further increase in water temperature, and a loss of woody debris and leaf litter, which provide food and habitat for some aquatic species.

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Low Impact Development (LID) strategies are designed to retain storm water runoff on-site by minimizing soil compaction and impervious surfaces, and by disconnecting storm water runoff from conveyances to the storm drain system. This Order establishes criteria for the volume of storm water to be retained on-site as required to meet water quality goals and to preserve pre-development hydrology in natural drainage systems.

Monitoring studies conducted by the California Department of Public Health (CDPH) have documented that mosquitoes opportunistically breed in structural storm water Best Management Practices (BMPs), particularly those that hold standing water for over 96 hours. Certain Low Impact Development (LID) site design measures that hold standing water such as rainwater capture systems may similarly produce mosquitoes. BMPs and LID design features should incorporate design, construction, and maintenance principles to promote drainage within 96 hours to minimize standing water available to mosquitoes. This Order requires regulated MS4 Permittees to coordinate with other agencies necessary to successfully implement the provisions of this Order. These agencies may include CDPH and local mosquito and vector control agencies on vector-related issues surrounding implementation of post-construction BMPs.

This Order is not intended to prohibit the inspection for or abatement of vectors by the State Department of Public Health or local vector agencies in accordance with CA Health and Safety Code, § 116110 et seq. and Water Quality Order No. 2012-0003-DWQ.

In California, hydromodification studies have focused on the erosive effects of storm water runoff flows and the resulting changes in geomorphology and bed sediment. As described in Hawley *et al.* (2011), southern California streams may be especially susceptible to geomorphic changes due to steep topography, flashy flow regimes, high sediment loads and largely non-resistant stream bed material.³² This recent study assessed the impact of urbanization on peak flow and the duration of lower flows capable of moving bed sediment. The results of the study showed that, urbanization resulted in proportionally-longer durations of all geomorphically-effective flows, with a more pronounced effect on the durations of low to moderate flows.

A study performed by United States Geological Survey (USGS) researchers at nine different metropolitan areas within the United States, found that adverse impacts to macroinvertebrate benthic communities were observed in drainages with 5 percent impervious area.³³ The authors concluded that there appears to be no percent impervious area threshold below which benthic communities are not adversely impacted

The Grand River (lower) Surrogate Flow Regime Total Maximum Daily Load (TMDL), prepared for the Ohio Environmental Protection Agency (OEPA),

³² Hawley, Robert J. 2011. The effects of urbanization on the hydrologic stability of small streams in southern California.

³³ Cuffney, T.F., Brightbill, R.A., May, J.T., and Waite, J.R. 2010. Responses of benthic macroinvertebrates to environmental changes associated with urbanization in nine metropolitan areas. *Ecological Applications* 20(5):1384-1401.

examined the impacts of impervious cover and flow regime changes on aquatic life beneficial uses.³⁴ The TMDL was approved by USEPA on April 12, 2012. The TMDL analysis showed that aquatic community health (as measured by biological indices) decreased as impervious cover increased. Flow alteration and impervious cover were determined to be the stressors impairing aquatic life. Riparian buffers were identified as a mitigating factor. Peak flow, runoff volume, and flashiness were considered as surrogates. However, for this watershed, flow regime was selected because it addresses the full spectrum of flow conditions (i.e., peak flow and flow duration and base flow). In this watershed, low flow and increased water temperature presented a threat to cold-water fish species. Increased peak flow and flow duration were linked to impairment of aquatic life beneficial uses due to increased pollutant loading and the impact of channel scouring. A flow duration curve was developed for a reference watershed, based on unit area to allow for comparison of varying-sized streams. The criteria for selecting the reference watershed were: (1) the water body was fully supporting aquatic life beneficial uses, (2) location (ecoregion), (3) size (4) land cover (5) riparian buffer and (6) soils. The flow regime TMDL compares flow duration curves for the impaired stream and the reference stream. The TMDL is expressed as the difference between the impaired stream's flow and the reference stream's flow during all flow conditions. The TMDL report recommends protection strategy numeric targets of no more than 6 percent EIA with a forested (70 percent coverage) riparian buffer of 100 feet from the top of each stream bank (200 feet total).

In Los Angeles County, development has infringed upon or eliminated natural riparian buffers and existing development exceeds recommended percent impervious area in many watersheds. In addition, many water bodies have been armored or converted to engineered channels to manage flood hazards. Because of the hydrologic differences between engineered channels and natural water bodies, the Regional Water Board approaches each situation differently. Where development occurs in drainages to water bodies that have been converted to engineered channels, the Regional Water Board's regulatory approach is designed to reduce storm water runoff -- the most effective method for reducing pollutant loading. Alternatively, where development occurs in drainages to natural water bodies, the Regional Water Board regulatory approach aims to reduce pollutant loading conveyed by storm water runoff and to preserve or restore the pre-development hydrology. As a result of past development, it is likely that retrofitting of existing development will be necessary to restore watershed hydrology to pre-development conditions.

c. Applicability

New development and re-development projects subject to these requirements are described in Part VI.D.67.b. of this Order. Although not defined for large and medium MS4s, 40 CFR section 122.34 requires programs for small MS4s to

³⁴ [Ohio Environmental Protection Agency. Total Maximum Daily Loads for the Grand River \(lower\) Watershed. Draft Report. October 12, 2011.](#)

include all projects that disturb an area equal to or greater than 1 acre of land and add more than 10,000 square feet of impervious surface area. The list of new development projects subject to requirements, specified in this Order in Parts VI.D.1.c.i(1)(a) through (k) were either carried over from Order No. 01-182 or were developed for the Ventura County MS4 and are appropriate for defining new developments and redevelopments in this Order. Clarification is provided for developments in progress during formulation of this Order (Part VI.D.c.i(1)(4)).

New development/re-development projects are subject to either the Water Quality/Flow Reduction Resource Management Criteria in Part VI.D.67.c.i or potentially more stringent Hydromodification (Flow/ Volume/ Duration) Control Criteria. Note that hydromodification controls apply only to projects that drain to a natural water body that is a stream, creek or a river. Hydromodification controls do not apply to discharges to lakes, estuaries, or to the ocean, which are not susceptible to channel erosion.

- i. **Integrated Water Quality/ Flow Reduction /Resources Management Criteria (Part VI.D.67.c.i).** Projects located in drainages to water bodies that are now engineered channels are subject to Integrated Water Quality/Flow Reduction/Resources Management Criteria. These projects must be designed to minimize the footprint of the impervious area and to use low impact development (LID) strategies to disconnect the runoff from impervious area. The project must be designed to retain on-site the storm water runoff equal to the storm water quality design volume (SWQDv), unless it is determined that it is technically infeasible or there is an opportunity to contribute to an off-site regional ground water replenishment project.

The SWQDv is defined as the storm water runoff resulting from either:

- the 0.75 inch per 24 hour storm or
- the 85th percentile storm as defined in the Los Angeles County 85th percentile, 24-hour storm isohyetal map, whichever is greater.

This Order establishes a minimum design volume based on the 0.75 inch, 24-hour storm event as defined in the previous Los Angeles County MS4 permit (Order No. 01-182). This requirement is to prevent backsliding from the previous Order. The 85th percentile storm is the design storm used throughout most of the State of California for storm water treatment and LID BMPs designed for water quality protection.

Using detailed local rainfall data, the County of Los Angeles Hydrologist has developed the 85th percentile storm event isohyetal map, which exhibits the size of the 85th percentile storm event throughout Los Angeles County. Since this map uses detailed local rainfall data, it is more accurate for calculating the 85th percentile storm event than other methods which were included in Order No. 01-182. The other methods found in Order No. 01-182 were included as options to be used in the event that detailed accurate rainfall data

did not exist for various locations within Los Angeles County. Therefore, they have not been carried over into this Order.

Storm water runoff may be retained on-site by methods designed to intercept rain water via infiltration, bioretention, and harvest and use. Examples of LID Best Management Practices (BMPs) that may be employed to meet the storm water retention requirements include rain gardens, bioswales, pervious pavement, green roofs, and rainwater harvesting for use in landscape irrigation.

ii. **Alternative Compliance for Technical Infeasibility or Opportunity for Regional Ground Water Replenishment (Part VI.D.67.c.ii)**. This Order defines conditions that may make on-site retention of the SWQDv technically infeasible. These conditions include measures to:

- Ensure that on-site soils (*in-situ* or amended) have adequate infiltration rates for successful operation of infiltration BMPs,
- Protect groundwater and drinking water wells from contamination,
- Prevent infiltration that might exacerbate potential geotechnical hazards,
- Accommodate smart growth and infill or redevelopment.

A determination that compliance with the Integrated Water Quality/Flow Reduction/Resources Management Criteria is technically infeasible at the New Development/Re-development project site must be based on a site-specific hydrologic assessment or design analysis conducted and endorsed by a registered professional engineer, geologist, architect or landscape architect. This requirement is the same as contained in the Ventura County MS4 permit, and is necessary to ensure that a competent determination is conducted.

The criteria for technical infeasibility contained in Part VI.D.67.c.ii(2)(a) is necessary to ensure that the *in-situ* soil has adequate permeability to accommodate infiltration, and to ensure against premature failure of infiltration BMPs. A minimum infiltration rate of 0.3 inches per hour under saturated conditions is specified for infiltration BMPs (e.g., dry well, pervious pavement). Infiltration BMPs are restricted to Hydrologic Soil Groups A and B, by other California storm water regulatory agencies. For example, the Contra Costa County Program's Stormwater LID Design Guidebook prohibits routing storm water runoff to a dry (infiltration) well, developed in Hydrologic Soil Groups C and D³⁵. Infiltration rates for the lower permeability B soil group ranges between 0.30 and 0.15 inches per

³⁵ Contra Costa County Clean Water Program. 2010. Stormwater C.3 Guidebook, Stormwater Quality Requirements for Development Applications. Fifth Ed. October 20, 2010. p. 18. < www.cccleanwater.org >.

hour (USEPA, 2009, Appendix A)³⁶. This criterion is specified to ensure the viability of infiltration systems, which may be depended upon to meet the storm water design volume criteria.

Infiltration BMPs are distinguished from bioretention BMPs, which may be implemented in all soils types. Bioretention BMPs are constructed using a manufactured/imported media that must meet strict specifications. The media specification for bioretention facilities is the same as specified for biofiltration systems. The difference between bioretention and biofiltration is that biofiltration systems are designed with an underdrain, which may allow for the discharge of a significant portion of the design storm volume, as described below under Alternative Compliance Measures. Bioretention BMPs may not include an underdrain.

The criteria for determining Technical Infeasibility described in Part VI.D.67.c.ii.(2)(b)-(f) are the same as contained in the Ventura County MS4 permit, except that (2)(b) "locations where seasonal high ground water is *within 5 feet of the surface*", was expanded to "5 to 10 feet" of the surface, to be consistent with local LID Manuals developed by the City of Santa Monica and the City of Los Angeles.

iii. Alternative Compliance Measures (Part VI.D.67.c.iii.). This Order provides equally weighted alternatives to on-site retention of the SWQDv. One alternative is to employ infiltration at off-site locations, including regional groundwater replenishment projects. The Regional Water Board has included the alternative for regional ground water replenishment in recognition of the multiple benefits it can provide. In addition to providing similar water quality benefits as compared to on-site retention, analysis by NRDC and UCSB found that implementing low impact development practices that emphasize retention at new and redeveloped residential and commercial properties in the urbanized areas of southern California and limited portions of the San Francisco Bay area has the potential to increase local water supplies by up to 405,000 acre-feet of water per year by 2030. This volume represents roughly two-thirds of the volume of water used by the entire City of Los Angeles each year. In addition, the same study notes potential energy savings and reductions in CO₂ emissions.³⁷

iii. In an effort to promote retrofitting of existing development, alternative compliance measures may include the use of infiltration, bioretention, rainfall harvest and/or biofiltration at an existing development with similar land uses and where storm water runoff is expected to exhibit pollutant event mean concentrations (EMCs) that are comparable to or higher than the proposed new development re-development project. As another

³⁶ USEPA. 2009. (United States Environmental Protection Agency). Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy and Independence and Security Act. Office of Water. December 2009.

³⁷ NRDC Technical Report. A Clear Blue Future: How Greening California Cities Can Address Water Resources and Climate Change in the 21st Century. August 2009.

alternative the project proponent may comply with the Integrated Water Quality/Flow Reduction/Resources Management Criteria using biofiltration on the project site. The volume of storm water to be treated with biofiltration is 1.5 times the difference between the SWQDv and the volume of storm water runoff that can be reliably retained on the project site. The 1.5 multiplier is based on the finding in the *Ventura County Technical Guidance Manual* that biofiltration of 1.5 times the design volume will provide approximately the same pollutant removal as retention of the design volume on an annual basis.³⁸

The volume of storm water runoff to be intercepted at an off-site mitigation project is equal to the difference between the SWQDv and the volume of storm water runoff that can be *reliably retained* on the project site. The estimate of the volume that can be reliably retained on-site shall be based on conservative assumptions including permeability of soils under saturated conditions. When rainfall harvest and use is linked to irrigation demand, the demand shall be estimated based on conditions that exist during the wet weather, winter season.

Mitigation at off-site projects shall be designed to provide equal or greater water quality protection to the surface waters within the same subwatershed as the proposed project. Preferably, the mitigation site will be located within the same Hydrologic Unit Code (HUC)-12 drainage area as the proposed new development or re-development. However, the mitigation project may be located within the expanded HUC-10 drainage area, if approved by the Executive Officer of the Regional Water Board.

As described in the *Ventura County Technical Guidance Manual*, a biofiltration system as defined in this Order, including Attachment H, allows for incidental interception of approximately 40 percent of the treatment volume and treatment of the remaining volume through filtration, and aerobic and anaerobic degradation. The effectiveness of the biofiltration system is greatly impacted by the volume of storm water runoff that is intercepted through incidental infiltration. For this reason, biofiltration as defined in this Order, does not include flow-through planter box or vault type systems with impervious bottom layers, unless Executive Officer approval is obtained. In addition, biofiltration systems as defined in this Order, must meet the specifications for drain placement and planting media provided in Attachment L if they are to be credited as meeting the water quality/flow reduction requirements of the Alternative Compliance Measures of this Order, unless Executive Officer approval is obtained. Attachment H provides a compilation of recent information contained in the Contra Costa County C3 Guidebook and Order R2-2011-083, adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on November 28, 2011. These specifications are based on

³⁸ Ventura Countywide Stormwater Management Program. 2011. Ventura Technical Guidance Manual, Manual Update, 2011. Appendix D. July 13, 2011.

experiences in the San Francisco Bay Region and are designed to ensure optimum pollutant removal and to prevent premature failure of infiltration components of the biofiltration system.

iv. Water Quality Mitigation Criteria (Part VI.D.67.c.viii.(7).) When off-site mitigation is performed, the storm water runoff from the project site must be treated prior to discharge. Volume-based treatment BMPs are to be sized to treat the runoff from the 85th percentile, 24-hour storm event, as described above for storm water retention BMPs. Flow through treatment BMPs are to be sized based on a rainfall intensity of 0.2 inches per hour or the one year, one-hour rainfall intensity as determined from the Los Angeles County isohyetal map, whichever is greater. A minimum flow design of 0.2 inches per hour is consistent with Order No. 01-182 and is included to prevent back sliding. The one year, one-hour rainfall intensity is the flow requirement specified in the Los Angeles River Trash Total Maximum Daily Loads (TMDL) and other Trash TMDLs established in the Region. The Los Angeles County isohyetal map of the one-year, one-hour storm intensity provides an accurate measure of variable storm intensity throughout the County. The one-year, one-hour rain intensity within the County ranges from approximately 0.2 inch/hour to 1.1 inches per hour.

v. Hydromodification (Flow/ Volume/ Duration Control Criteria (Part VI.D.67.iv.).) New development/re-development projects located in a drainage to a natural stream/creek/river water body shall be required to meet the water quality/flow reduction criteria and/or hydromodification control criteria, whichever are more stringent. (Hydromodification controls do not apply to discharges to lakes, estuaries or to the Pacific Ocean as these types of water bodies are not susceptible to hydromodification impacts.) This Order provides Hydromodification Control Criteria to be employed. The purpose of the hydromodification controls is to preserve or restore pre-development hydrology.

Part VI.D.67.iv.(b) of this Order describes New Development/Re-development projects that are exempted from hydromodification controls. These projects include maintenance and replacement activities and other projects that do not increase EIA within the subwatershed and therefore are not expected to add to the hydromodification effects. Also exempted are projects located within drainages to waterbodies that are not susceptible to channel erosion or other hydromodification effects.

This Order offers four options for meeting the hydromodification controls for projects that will disturb greater than 1 acre but less than 50 acres:

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- The project is designed to retain the storm water runoff from the 95th percentile, 24-hour storm. This criterion is based on the recommendations from the USEPA's *Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act* (USEPA, 2009).
- The runoff flow rate, volume, velocity and duration does not exceed the pre-development condition for the 2-year, 24-hour rainfall event. Research has determined that the maximum point of the effective work curve occurs in the 1 to 2-year frequency (Leopold, 1964, as cited in the South Orange County Hydromodification Plan, 2011)³⁹. Furthermore, the effects of development are greatest during smaller storm events. Under natural conditions, the storm water runoff from smaller storms would have been largely intercepted by vegetation, canopy, infiltration and/or evapotranspiration. During large storms, the soils become saturated and runoff occurs even under natural conditions.
- The Erosion Potential (Ep) in the receiving water channel will approximate 1, as determined by the Hydromodification Analysis Study and the Equation presented in Attachment J. This provision is the same as the requirement in the Ventura County MS4 permit (Order No. R4-2010-0108). By maintaining an Ep of approximately 1, the bed sediment of the channel is in an equilibrium state. Alternatively, Permittees can opt to use other work equations to calculate Erosion Potential with Executive Officer approval.
 - Permittees may also satisfy the requirement for Hydromodification Controls by implementing the hydromodification requirements in the County of Los Angeles Low Impact Development Manual (2009) for all projects disturbing an area greater than 1 acre within natural drainage systems.

For projects disturbing more than 50 acres, compliance with the controls may be achieved by similar means. However, the plans must be supported by more comprehensive hydrologic modeling. The final Subwatershed Hydromodification Plan must be completed within one year after the effective date of the Order.

The elements of the Subwatershed Hydromodification Plan are:

- Screening to assess which subwatersheds exhibit changes in geomorphology.
- Identify natural drainage systems within the subwatershed that are susceptible to hydromodification impacts,

³⁹ South Orange County. 2011. South Orange County Hydromodification Management Plan. < http://www.waterboards.ca.gov/sandiego/water_issues/programs/stormwater/docs/oc_permit/updates_031212/South_Orange_County%20HMP.pdf > Accessed April 25, 2012.

- Identify areas critical to the hydrology (e.g., groundwater recharge areas, riparian buffers and wetlands) of the subwatershed and identify potential protection strategies for such areas,
- Conduct or access bioassessment monitoring data to assess whether aquatic life uses are being fully supported,
- Prepare preliminary protection strategies for subwatersheds that are fully supporting aquatic life beneficial uses,
- Prepare preliminary retrofit strategies for subwatersheds that exhibit the effects of hydromodification and are not fully supporting aquatic life beneficial uses,
- Identify candidate reference sub-watersheds that are supporting aquatic life beneficial uses and develop a flow duration curve that may serve as a standard for flow duration controls in water bodies that have aquatic life impairments linked to changes in the flow regime. This approach is as described in the recently approved OEPA, Grand River (lower) Flow Regime TMDL.

7. Development and Construction Program

a. Introduction

Soil disturbing activities during construction and demolition exacerbate sediment losses. Sediment is a primary pollutant impacting beneficial uses of watercourses. Sediments, and other construction activity pollutants must be properly controlled to reduce or eliminate adverse impacts.

b. Legal Authority

40 CFR section 122.34(b)(4) states that with respect to construction site storm water runoff control for small MS4s, which is analogous to that for large MS4s:

“(i) [the permittee] must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. If the NPDES permitting authority waives requirements for storm water discharges associated with small construction activity in accordance with § 122.26(b)(15)(i), you are not required to develop, implement, and/or enforce a program to reduce pollutant discharges from such sites. (ii) Your program must include the development and implementation of, at a minimum: (A) An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State, Tribal, or local law; (B) Requirements for construction site operators to implement

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appropriate erosion and sediment control best management practices; (C) Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality; (D) Procedures for site plan review which incorporate consideration of potential water quality impacts; (E) Procedures for receipt and consideration of information submitted by the public, and (F) Procedures for site inspection and enforcement of control measures.”

The inspection requirements for construction sites contained in this Order are also based on the requirements found in Order No. 01-182. As noted above in Part VI.C.5.a, the inspection requirements contained in Order No. 01-182 for construction sites were the subject of litigation between several permittees and the Regional Water Board. As provided in more detail above, the Los Angeles County Superior Court upheld the inspection requirements for industrial/commercial facilities and construction sites in Order No. 01-182, finding that the “[t]he Permit contains reasonable inspection requirements for these types of facilities.” (*In re L.A. Cnty. Mun. Storm Water Permit Litig.* (L.A. Super. Ct., No. BS 080548, Mar. 24, 2005), Statement of Decision from Phase II Trial on Petitions for Writ of Mandate, p. 17.) As also noted above, the Superior Court also rejected the permittees’ claims that the requirements in Order No. 01-182 shifted the Regional Water Board’s inspection responsibility under State Water Board issued general NPDES permits for these types of facilities onto the local agencies, finding that “[r]equiring permittees to inspect commercial and industrial facilities and construction sites is authorized under the Clean Water Act, and both the Regional Board and the municipal permittees or the local government entities have concurrent roles in enforcing the industrial, construction and municipal permits. The Court finds that the Regional Board did not shift its inspection responsibilities to Petitioners.” (*Id.* at 17-18.)

As previously noted for inspections of commercial/industrial facilities, the California Court of Appeal also rejected arguments pertaining to similar inspection requirements for construction sites prescribed by the Santa Ana Regional Water Board. (*City of Rancho Cucamonga v. Regional Water Quality Control Board- Santa Ana Region* (2006) 135 Cal.App.4th 1377, 1389.) In that case, the City of Rancho Cucamonga claimed that the Santa Ana Regional Water Board improperly delegated to it and other permittees the inspection duties of the State and Regional Water Boards and that it was being required to conduct inspections for facilities covered by other state-issued general NPDES permits. The Court of Appeal upheld the Santa Ana Regional Water Board’s requirements, finding that “Rancho Cucamonga and the other permittees are responsible for inspecting construction and industrial sites and commercial facilities within their jurisdiction for compliance with and enforcement of local municipal ordinances and permits. But the Regional Board continues to be responsible under the 2002 NPDES permit for inspections under the general permits. The Regional Board may conduct its own inspections but permittees

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must still enforce their own laws at these sites. (40 C.F.R. § 122.26, subd. (d)(2) (2005).)” (*Id.* at 1390.)

c. Construction Activity Applicability

Any construction or demolition activity, including, but not limited to, clearing, grading, grubbing, or excavation, or any other activity that results in a land disturbance of equal to or greater than one acre.

Construction activity that results in land surface disturbances of less than one acre if the construction activity is part of a larger common plan of development or sale of one or more acres of disturbed land surface.

Construction activity related to residential, commercial, or industrial development on lands currently used for agriculture including, but not limited to, the construction of buildings related to agriculture that are considered industrial pursuant to USEPA regulations, such as dairy barns or food processing facilities.

Construction activity associated with linear underground/overhead project (LUPs) including, but not limited to, those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities) and include, but are not limited to, underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/tower pad and cable/wire pull station, substation construction, substructure installation, construction of tower footings and/or foundations, pole and tower installations, pipeline installations, welding, concrete and/or pavement repair or replacement, and stockpile/borrow locations.

Discharges of sediment from construction activities associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities.

Storm water discharges from dredge spoil placement that occur outside of U.S. Army Corps of Engineers jurisdiction⁴⁰ (upland sites) and that disturb one or more acres of land surface from construction activity are covered by this General Permit. Construction projects that intend to disturb one or more acres of land within the jurisdictional boundaries of a CWA section 404 permit should contact the appropriate Regional Water Board to determine whether this permit applies to the project.

d. Development Construction Program Implementation

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⁴⁰ A construction site that includes a dredge and/or fill discharge to any water of the United States (e.g., wetland, channel, pond, or marine water) requires a permit from the U.S. Army Corps of Engineers pursuant to CWA section 404 and a Water Quality Certification from the Regional Water Board or State Water Board pursuant to CWA section 401.

Permittees must implement a construction program that applies to all activities involving soil disturbance with the exception of agricultural activities. Minimum requirements have been established for construction activity less than one acre and for those activities equal or greater than one acre. Activities covered by the permit include but are not limited to grading, vegetation clearing, soil compaction, paving, re-paving, and LUPs. The construction program should be designed to: (1) prevent illicit construction-related discharges of pollutants into the MS4 and receiving waters; (2) implement and maintain structural and non-structural BMPs to reduce pollutants in storm water runoff from construction sites; (3) reduce construction site discharges of pollutants to the MS4 to the MEP; and (4) prevent construction site discharges to the MS4 from causing or contributing to a violation of water quality standards.

Each permittee shall use an site system to track grading permits, encroachment permits, demolition permits, building permits, or construction permits (and any other municipal authorization to move soil and/ or construct or destruct that involves land disturbance) issued by each permittee. To satisfy this requirement, the use of a database or GIS system is recommended.

For construction activity equal or greater than one acre, the Permittee must establish review procedures for construction site plans to determine potential water quality impacts and ensure the proposed controls are adequate. These procedures should include the preparation and submission of an Erosion and Sediment Control Plan (ESCP) containing elements of a Storm Water Pollution Prevention Plan (SWPPP) prior to issuance of a grading or building permit as well as a review of individual pre-construction site plans to ensure consistency with local sediment and erosion control requirements. The requirement that ESCP/SWPPPs must be developed by a Qualified SWPPP Developer (QSD) is new for this iteration of the permit. This requirement ensures the development of high quality ESCP/SWPPPs that protect water quality to the MEP.

A ESCP/SWPPP must be appropriate for the type and complexity of a project and will be developed and implemented to address project specific conditions. Some projects may have similarities or complexities, yet each project is unique in its progressive state that requires specific description and selection of BMPs needed to address all possible generated pollutants. The Permittee must ensure that construction site operators select and implement appropriate erosion and sediment control measures to reduce or eliminate the impacts to receiving waters. To help guide their Construction Program and ensure consistency regarding BMP selection, the Permit requires the Permittee to develop or adopt BMP standards for a range of construction related activities. The list of activities is based on California Stormwater Quality Association's (CASQA) Construction BMP handbook. The ESCP/SWPPP must include the rationale used for selecting or rejecting BMPs. The project architect, or engineer of record, or authorized qualified designee, must sign a statement on the ESCP/SWPPP to the effect:

"As the architect/ engineer of record, I have selected, appropriate BMPs to effectively minimize the negative impact of the project's construction activities on

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storm water quality. The project owner and contractor are aware that the selected BMPs must be installed, monitored, and maintained to ensure their effectiveness. The BMPs not selected for implementation are redundant or deemed not applicable to the proposed construction activity."

The Permittee is responsible for conducting inspection and enforcement of erosion and sediment control measures at specified times and frequencies during construction including prior to land disturbance, during grading and land development, during streets and utilities activities, during vertical construction, and during final landscaping and site stabilization. The Permittees' Municipal Inspectors must be adequately trained and Permittees are encouraged to offer opportunities for inspectors to enroll in the State Water Board sponsored Qualified Storm Water Pollution Prevention Plan (SWPPP) Practitioner (QSP) certification program. A progressive enforcement policy has been integrated into this iteration of the permit to ensure that adequate penalties are in place and to ensure the protection of receiving water quality.

Prior to approving and/ or signing off for occupancy and issuing the Certificate of Occupancy for all construction projects subject to post-construction controls, each permittee shall inspect the constructed site design, source control and treatment control BMPs to verify that they have been constructed in compliance with all specifications, plans, permits, ordinances, and this Order. The initial/ acceptance BMP verification inspection does not constitute a maintenance and operation inspection.

The Permittee must ensure that staff has proper training. In addition, the Permittee must develop and distribute training and educational material and conduct outreach to the development community. To ensure that the construction program is followed, construction operators must be educated about site requirements for control measures, local storm water requirements, enforcement activities, and penalties for non-compliance.

8. Public Agency Activities Program

a. Background

Publically-owned or operated facilities serve as hubs of activity for a variety of municipal staff from many different departments. Some municipalities will have one property at which all activities take place (e.g., the municipal maintenance yard), whereas others will have several specialized facilities such as animal control facilities, chemical storage facilities, composting facilities, equipment storage and maintenance facilities, fueling facilities, hazardous waste disposal facilities, incinerators, landfills, materials storage yards, pesticide storage facilities, public buildings, public parking lots, public golf courses, public swimming pools, public parks, public marinas, recycling facilities, solid waste handling and transfer facilities, and flood control facilities.

b. Program Implementation

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i. Public Construction Activities Management

The Permittee is required to implement BMPs and comply with the Planning and Land Development Program requirements in Part VI.D.6 of this Order and the Development Construction Program requirements in Part VI.D.7 of this Order at applicable Permittee-owned or operated (i.e., public or Permittee sponsored) construction projects. These requirements ensure that Permittee-owned or operated construction and development occurs in an equally protective manner as private development. The Permittee is also required to implement an effective combination of erosion and sediment control BMPs from Table 13 (see Construction Development Program, minimum BMPs) at those public sites that disturb less than one acre of soil. Last, the Permittee is required to obtain separate coverage under the State Water Board's Construction General NPDES Permit for all Permittee-owned or operated construction sites that require coverage.

ii. Public Facility Inventory

A comprehensive list of publically-owned or operated facilities will help staff responsible for storm water compliance build a better awareness of their locations within the MS4 service area and their potential to contribute storm water pollutants. The inventory should include information on the location, contact person at the facility, activities performed at the facility, and whether the facility is covered under an industrial general storm water permit or other individual or general NPDES permit, or any applicable waivers issued by the Regional or State Water Board pertaining to storm water discharges. Incorporation of GIS into the inventory is encouraged. The facility inventory should be updated at least twice during the permit term and will serve as a basis for setting up periodic facility assessments and developing, where necessary, facility storm water pollution prevention plans. By developing an inventory of Permittee-owned facilities that are potential sources of storm water pollution helps to ensure that these facilities are monitored and receiving water quality is protected.

iii. Inventory of Existing Development for Retrofitting Opportunities

Each Permittee is required to maintain an updated inventory of all Permittee-owned or operated (i.e., public) facilities within its jurisdiction that are potential sources of storm water pollution. This requirement is similar to the requirement of Order No. 01-182. In this Order, the incorporation of facility information into a GIS is recommended as this has been proven effective for effectively inventory and management of facilities and associated BMPs. Given that facility operation, condition, and practices can change over a five year period, the Permittees are required to update its inventory at least twice during the term of this Order.

In addition to developing an inventory of publically-owned or operated facilities, in this Order, Permittees are required to develop an inventory of existing development for retrofitting opportunities. The intention of adding

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this requirement to the permit is to encourage the use of retrofit projects that reduce storm water pollutants into the MS4 that are a result of impacts from existing development. Permittees are also required to evaluate and rank these retrofitting opportunities.

iv. Public Agency Facility and Activity Management

Each Permittee is required to manage its facilities in accordance with the State Water Board’s Industrial General NPDES Permit, where applicable, and shall ensure the implementation and maintenance of appropriate BMPs at all facilities with a potential to pollute stormwater. Therefore, Permittees shall obtain separate coverage under the State Water Board’s Industrial General NPDES Permit for all Permittee-owned or operated facilities where industrial activities are conducted that require coverage under the Industrial General NPDES Permit and shall implement and maintain activity specific BMPs listed in Table 19 (BMPs for Public Agency Facilities and Activities).

Many municipalities use third-party contractors to conduct municipal maintenance activities in lieu of using municipal employees. Contractors performing activities that can affect storm water quality must be held to the same standards as the Permittee. Not only must these expectations be defined in contracts between the Permittee and its contractors, but the Permittee is responsible for ensuring, through contractually-required documentation or periodic site visits, that contractors are using storm water controls and following standard operating procedures. Therefore, the Permittee shall ensure all contractors hired by the Permittee to conduct Public Agency Activities including, but not limited to, storm and/or sanitary sewer system inspection and repair, street sweeping, trash pick-up and disposal, and street and right-of-way construction and repair shall be contractually required to implement and maintain the activity specific BMPs listed in Table 18.

v. Vehicle and Equipment Washing

Specific BMPs for all fixed vehicle and equipment washing; including fire fighting and emergency response vehicles have been incorporated into this Order and must be implemented. In addition, specific BMPs for wash waters from vehicle and equipment washing. These requirements effectively prohibit the occurrence of illicit discharges resulting from unauthorized washing activities.

vi. Landscape, Park, and Recreational Facilities Management

Specific BMPs for public right-of-ways, flood control facilities and open channels, lakes and reservoirs, and landscape, park, and recreation facilities and activities have been included this Order, similar to those in Order No. 01-182 and the more recently adopted Ventura County MS4

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Permit, and must be implemented. These requirements are reflective of current environmentally responsible practices.

vii. Storm Drain Operation and Maintenance

Specific BMPs for storm drain operations and maintenance have been carried over from Order No. 01-182 into this Order.

Permittees must prioritize catch basins for cleaning activities based on the volume of trash or debris.

The materials removed from catch basins may not reenter the MS4. The material must be dewatered in a contained area and the water treated with an appropriate and approved control measure or discharged to the sanitary sewer. The solid material will need to be stored and disposed of properly to avoid discharge during a storm event. Some materials removed from storm drains and open channels may require special handling and disposal, and may not be authorized to be disposed of in a landfill.

viii. Streets, Roads, and Parking Facilities Maintenance

Permittees must prioritize streets and/or street segments for sweeping activities based on the volume of trash generated on the street or street segments. Based on these established priorities, Permittees must conduct street sweeping twice per month on the highest priority streets (Priority A), once per month on the medium priority streets (Priority B), and as needed but not less than once per year on the lowest priority streets (Priority C). In addition parking facilities must be cleaned using street sweeping equipment no less than two times per month and inspect no less than two times per month to determine if cleaning is necessary.

Specific BMPs for road reconstruction have been incorporated into this Order and must be followed during road repaving activities.

ix. Emergency Procedures

Permittees are required to conduct repairs of essential public service systems and infrastructure in emergency situations. These requirements ensure the protection of water quality. BMPs must be implemented to reduce the threat to water quality and the Regional Water Board must be notified of the occurrence, an explanation of the circumstances and measures taken to reduce the threat to water quality within 30 business days after the emergency has passed.

x. Municipal Employee and Contractor Training

Permittees are required to ensure that training is provided for employees and contractors that have job duties or participate in activities that have the potential to affect storm water quality. The training should promote a general

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understanding of the potential for activities to pollute storm water and include information on the identification of opportunities to require, implement, and maintain BMPs associated with the activities they perform. In addition training specific to employees or contractors that use or have the potential to use pesticides or fertilizers should be provided. This training should instruct employees and contractors on the potential for pesticide-related surface water toxicity, the proper use, handling and disposal of pesticides, the least toxic methods of pest prevention and control, and the overall reduction of pesticide use.

Many municipalities use third-party contractors to conduct municipal maintenance activities in lieu of using municipal employees. Contractors performing activities that can affect storm water quality must be held to the same standards as the Permittee. Not only must these expectations be defined in contracts between the Permittee and its contractors, but the Permittee is responsible for ensuring, through contractually-required documentation or periodic site visits, that contractors are using storm water controls and following standard operating procedures.

9. Illicit Connection and Illicit Discharge Elimination Program

a. Legal Authority

A proposed management program “shall be based on a description of a program, including a schedule, to detect and remove (or require the discharger to the municipal storm sewer to obtain a separate NPDES permit for) illicit discharges and improper disposal into the storm sewer,” per 40 CFR section 122.26(d)(2)(iv)(B). A Permittee must include in its proposed management program “a program, including inspections, to implement and enforce an ordinance, orders or similar means to prevent illicit discharges to the municipal storm sewer system,” per subsection (1) of the above federal regulation.

USEPA stormwater regulations define "illicit discharge" as "any discharge to a municipal separate storm sewer that is not composed entirely of stormwater" except discharges resulting from fire fighting activities and discharges from NPDES permitted sources (see 40 CFR section 122.26(b)(2)). The applicable regulations state that the following non-stormwater discharges may be allowed if they are not determined to be a significant source of pollutants to the MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR section 35.2005(20)), uncontaminated pumped ground water, discharges from potable drinking water supplier distribution sourceessystems, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water. If, however, these discharges are determined to be a significant source of pollution then they must be prohibited.

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Examples of common sources of illicit discharges in urban areas include apartments and homes, car washes, restaurants, airports, landfills, and gas stations. These so called "generating sites" discharge sanitary wastewater, septic system effluent, vehicle wash water, washdown from grease traps, motor oil, antifreeze, gasoline and fuel spills, among other substances. Although these illicit discharges can enter the storm drain system in various ways, they generally result from either direct connections (e.g., wastewater piping either mistakenly or deliberately connected to the storm drains) or indirect connections (e.g., infiltration into the storm drain system, spills, or "midnight dumping"). Illicit discharges can be further divided into those discharging continuously and those discharging intermittently.

b. Illicit Discharge Source Investigation and Elimination

Section 402(p)(3)(B)(ii) of the CWA requires MS4 permits to “effectively prohibit non-stormwater discharges into the storm sewers.” The permit implements this requirement, in part by requiring the development of procedures to investigate and eliminate illicit discharges. The permittee must develop a clear, step-by-step procedure for conducting the investigation of illicit discharges. The procedure must include an investigation protocol that clearly defines what constitutes an illicit discharge and what steps shall be taken to identify and eliminate its source. In many circumstances, sources of intermittent, illicit discharges are very difficult to locate, and these cases may remain unresolved. The permit requires that each case be conducted in accordance with the procedures developed to locate the source and conclude the investigation, after which the case may be considered closed. These procedures should be completed per the Progressive Enforcement Policy identified in Part VI.D.2 of this Order and should include enforcement as necessary to ensure the elimination of the illicit discharge/connection.

Illicit discharges may also originate in upstream jurisdictions and therefore this Order establishes procedures for communicating with upstream entities and providing information that may prove helpful in their investigation of its source(s).

If a Permittee is unable to eliminate an ongoing illicit discharge following full execution of its legal authority and in accordance with its Progressive Enforcement Policy, or other circumstances prevent the full elimination of an ongoing illicit discharge, including the inability to find the responsible party/parties, the Permittee shall ~~provide for~~ require diversion of the entire flow to the sanitary sewer or ~~provide~~ treatment. In either instance, the Permittee shall notify the Regional Water Board in writing within 30 days of such determination and shall provide a written plan for review and comment that describes the efforts that have been undertaken to eliminate the illicit discharge, a description of the actions to be undertaken, anticipated costs, and a schedule for completion. The goal of these requirements is to provide a permanent solution for ongoing illicit discharges.

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c. Identification and Response to Illicit Connections

Illicit connections to the MS4 can lead to the direct discharge or infiltration of sewage or other prohibited discharges into the MS4. Permittees have been conducting illicit connection screening throughout the term of Order No. 01-182 and this Order requires a continuation of response efforts once an illicit connection is identified. This Order establishes unique obligations for the LACFCD and for the individual Permittees. The requirements for LACFCD are based on the unique obligations and infrastructure of a regional flood control district. Requirements for the individual Permittees require the investigation and follow-up of all illicit connections within 21 days of identification and elimination within 180 days.

d. Public Reporting of Non-Storm Water Discharges and Spills

Each Permittee needs to promote a program to help in the identification and termination of illicit discharges. This Order establishes requirements for the Permittees, individually or as a group, to develop public education campaigns and reporting numbers which are intended to promote public reporting of illicit discharges. Specifically, a stormwater hotline can be used to help permittees become aware of and mitigate spills or dumping incidents. Spills can include everything from an overturned gasoline tanker to sediment leaving a construction site to a sanitary sewer overflow entering into a storm drain. Permittees must set up a hotline consisting of any of the following (or combination thereof): a dedicated or non-dedicated phone line, E-mail address, or website.

This Order also requires development of written procedures for receiving and responding to calls from the public and for maintaining documentation about reported illicit discharges and spills and their investigation and remedy. These requirements are intended to ensure that reliable and consistent practices are deployed to address this persistent problem.

e. Spill Response Plan

Spills, leaks, sanitary sewer overflows, and illicit dumping or discharges can introduce a range of stormwater pollutants into the storm system. Prompt response to these occurrences is the best way to prevent or reduce negative impacts to waterbodies. The permittee must develop a spill response plan that includes an investigation procedure similar to or in conjunction with the investigation procedures developed for illicit discharges in general. Often, a different entity might be responsible for spill response in a community (i.e. fire department), therefore, it is imperative that adequate communication exists between stormwater and spill response staff to ensure that spills are documented and investigated in a timely manner.

f. Illicit Connection and Illicit Discharge Education and Training

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The permit requires each Permittee to train field staff, who may come into contact or observe illicit discharges, on the identification and proper procedures for reporting illicit discharges. Field staff to be trained may include, but are not limited to, municipal maintenance staff, inspectors, and other staff whose job responsibilities regularly take them out of the office and into areas within the MS4 area. Permittee field staff are out in the community every day and are in the best position to locate and report spills, illicit discharges, and potentially polluting activities. With proper training and information on reporting illicit discharges easily accessible, these field staff can greatly expand the reach of the IDDE program.

10. Los Angeles County Flood Control District Section

Due to the unique characteristics of the Los Angeles County Flood Control District, a Minimum Control Measure Section unique to the Los Angeles County Flood Control District was included in the Order. Unlike other Permittees, the LACFCD does not own or operate any municipal sanitary sewer systems, public streets, roads, or highways. Additionally, The LACFCD has no planning, zoning, development permitting or other land use authority over industrial or commercial facilities, new developments or re-development projects, or development construction sites located in any incorporated or unincorporated areas within its service area. The Permittees that have such land use authority are responsible for implementing a storm water management program to inspect and control pollutants from industrial and commercial facilities, new development and re-development projects, and development construction sites within their jurisdictional boundaries. The requirements included in the Section are the same as those for other Permittees, but requirements that are not applicable due to the unique characteristic of the Los Angeles County Flood Control District were eliminated.

D. Total Maximum Daily Load Provisions

Clean Water Act section 303(d)(1)(A) requires each State to conduct a biennial assessment of its waters, and identify those waters that are not achieving water quality standards. These waters are identified as impaired on the State’s Clean Water Act section “303(d) List” of water quality limited segments. The Clean Water Act also requires States to establish a priority ranking for waters on the 303(d) List and to develop and implement Total Maximum Daily Loads (TMDLs) for these waters. A TMDL specifies the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and allocates the acceptable pollutant load to point and nonpoint sources. The elements of a TMDL are described in 40 CFR sections 130.2 and 130.7. A TMDL is defined as “the sum of the individual waste load allocations for point sources and load allocations for nonpoint sources and natural background” (40 CFR § 130.2). Regulations further require that TMDLs must be set at “levels necessary to attain and maintain the applicable narrative and numeric water quality standards with seasonal variations and a margin of safety that takes into account

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any lack of knowledge concerning the relationship between effluent limitations and water quality” (40 CFR section 130.7(c)(1)). The regulations at 40 CFR section 130.7 also state that TMDLs shall take into account critical conditions for stream flow, loading and water quality parameters. Essentially, TMDLs serve as a backstop provision of the CWA designed to implement water quality standards when other provisions have failed to achieve water quality standards.

Upon establishment of TMDLs by the State or the USEPA, the State is required to incorporate, or reference, the TMDLs in the State Water Quality Management Plan (40 CFR sections 130.6(c)(1) and 130.7). The Regional Water Board’s Basin Plan, and applicable statewide plans, serves as the State Water Quality Management Plan governing the watersheds under the jurisdiction of the Regional Water Board. When adopting TMDLs as part of its Basin Plan, the Regional Water Board includes, as part of the TMDL, a program for implementation of the WLAs for point sources and load allocations (LAs) for nonpoint sources.

TMDLs are not self-executing, but instead rely upon further Board orders to impose pollutant restrictions on discharges to achieve the TMDL’s WLAs. Section 402(p)(3)(B)(iii) of the Clean Water Act requires the Regional Water Board to impose permit conditions, including: “management practices, control techniques and system, design and engineering methods, and *such other provisions as the Administrator of the State determines appropriate for the control of such pollutants.*” (emphasis added.) Section 402(a)(1) of the Clean Water Act also requires states to issue permits with conditions necessary to carry out the provisions of the Clean Water Act. Federal regulations also require that NPDES permits must include conditions consistent with the assumptions and requirements of any available waste load allocation (40 CFR section 122.44(d)(1)(vii)(B)). Similarly, state law requires both that the Regional Water Board implement its Basin Plan when adopting waste discharge requirements (WDRs) and that NPDES permits apply “any more stringent effluent standards or limitations necessary to implement water quality control plans...” (Cal. Wat. Code §§ 13263, 13377).

An NPDES permit should incorporate the WLAs as numeric WQBELs, where feasible. Where a non-numeric permit limitation is selected, such as BMPs, the permit’s administrative record must support the expectation that the BMPs are sufficient to achieve the WLAs. (40 CFR §§ 124.8, 124.9, and 124.18.) The USEPA has published guidance for establishing WLAs for storm water discharges in TMDLs and their incorporation as numeric WQBELs in MS4 permits.⁴¹

As required, permit conditions are included in this Order consistent with the assumptions and requirements of the available WLAs assigned to MS4 discharges, which have been established in thirty-three TMDLs. The Regional Water Board adopted twenty-five (25) TMDLs and USEPA established seven (7) TMDLs that assign WLAs to MS4 Permittees within the County of Los Angeles. In addition, the Santa Ana

⁴¹ USEPA (2010) “Revisions to the November 22, 2002 Memorandum ‘Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those TMDLs’.” Issued by James A. Hanlon, Director, Office of Wastewater Management and Denise Keehner, Director, Office of Wetlands, Oceans and Watersheds. November 12, 2010.

Regional Water Board adopted a TMDL that assigns WLAs to the Cities of Pomona and Claremont. The TMDLs included in this Order along with the adoption and approval dates are listed in the table below. Permit conditions for two of these TMDLs – the Marina del Rey Harbor Bacteria TMDL and the Los Angeles River Watershed Trash TMDL – were previously incorporated into Order No. 01-182 during re-openers in 2007 and 2009, respectively (Orders R4-2007-0042 and R4-2009-0130). TMDLs are typically developed on a watershed or subwatershed basis, which facilitates a more accurate assessment of cumulative impacts of pollutants from all sources. An overview of each Watershed Management Area, including the TMDLs applicable to it, is provided below.

TMDLs with Resolution Numbers, Adoption Dates and Effective Dates

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TOTAL MAXIMUM DAILY LOAD	RESOLUTION NUMBER	ADOPTION DATE	STATE BOARD RESOLUTION NUMBER	STATE BOARD APPROVAL DATE	OAL APPROVAL DATE	EPA APPROVAL DATE	EFFECTIVE DATE
Santa Clara River Watershed Management Area							
Santa Clara River Nitrogen Compounds TMDL	2003-011	8/7/2003	2003-0073	11/19/2003	2/27/2004	3/18/2004	3/23/2004
Upper Santa Clara River Chloride TMDL	2008-012	12/11/2008	2009-0077	10/20/2009	1/26/2010	4/6/2010	4/6/2010
Lake Elizabeth, Munz Lake, and Lake Hughes Trash TMDL (Lake Elizabeth only)	2007-009	6/7/2007	2007-0073	12/4/2007	2/8/2008	2/27/2008	3/6/2008
Santa Clara River Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL	R10-006	7/8/2010	2011-0048	10/4/2011	12/19/2011	1/13/2012	3/21/2012
Santa Monica Bay Watershed Management Area							
Santa Monica Bay Beaches Bacteria TMDL (Dry Weather)	2002-004	1/24/2002	2002-0149	9/19/2002	12/9/2002	6/19/2003	7/15/2003
Santa Monica Bay Beaches Bacteria TMDL (Wet Weather)	2002-022	12/12/2002	2003-0022	3/19/2003	5/20/2003	6/19/2003	7/15/2003
Santa Monica Bay Nearshore and Offshore Debris TMDL	R10-010	11/4/2010	2011-0064	12/6/2011	3/15/2012	3/20/2012	3/20/2012
Santa Monica Bay TMDL for DDTs and PCBs (USEPA established)	N/A	N/A	N/A	N/A	N/A	3/26/2012	N/A
Malibu Creek Subwatershed							
Malibu Creek and Lagoon Bacteria TMDL	2004-019R	12/13/2004	2005-0072	9/22/2005	12/1/2005	1/10/2006	1/24/2006
Malibu Creek Watershed Trash TMDL	2008-007	5/1/2008	2009-0029	3/17/2009	6/16/2009	6/26/2009	7/7/2009
Malibu Creek Watershed Nutrients TMDL (USEPA established)	N/A	N/A	N/A	N/A	N/A	3/21/2003	N/A
Ballona Creek Subwatershed							
Ballona Creek Trash TMDL	2004-023	3/4/2004	2004-0059	9/30/2004	2/8/2005	N/A	8/11/2005
Ballona Creek Estuary Toxic Pollutants TMDL	2005-008	7/7/2005	2005-0076	10/20/2005	12/15/2005	12/22/2005	1/11/2006
Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL	2006-011	6/8/2006	2006-0092	11/15/2006	2/20/2007	3/26/2007	4/27/2007

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TOTAL MAXIMUM DAILY LOAD	RESOLUTION NUMBER	ADOPTION DATE	STATE BOARD RESOLUTION NUMBER	STATE BOARD APPROVAL DATE	OAL APPROVAL DATE	EPA APPROVAL DATE	EFFECTIVE DATE
Ballona Creek Metals TMDL	2007-015	9/6/2007	2008-0045	6/17/2008	10/6/2008	10/29/2008	10/29/2008
Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation (USEPA established)	N/A	N/A	N/A	N/A	N/A	3/26/2012	N/A
Marina del Rey Subwatershed							
Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL	2003-012	8/7/2003	2003-0072	11/19/2003	1/30/2004	3/18/2004	3/18/2004
Marina del Rey Harbor Toxic Pollutants TMDL	2005-012	10/6/2005	2006-0006	1/13/2006	3/13/2006	3/16/2006	3/22/2006
Dominguez Channel and Greater Harbors Waters Watershed Management Area							
Los Angeles Harbor Bacteria TMDL (Inner Cabrillo Beach and Main Ship Channel)	2004-011	7/1/2004	2004-0071	10/21/2004	1/5/2005	3/1/2005	3/10/2005
Machado Lake Trash TMDL	2007-006	6/7/2007	2007-0075	12/4/2007	2/8/2008	2/27/2008	3/6/2008
Machado Lake Nutrient TMDL	2008-006	5/1/2008	2008-0089	12/2/2008	2/19/2009	3/11/2009	3/11/2009
Machado Lake Pesticides and PCBs TMDL	R10-008	9/2/2010	2011-0065	12/6/2011	2/29/2012	3/20/2012	3/20/2012
Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL	R11-008	5/5/2011	2012-0008	2/7/2012	3/21/2012	3/23/2012	3/23/2012
Los Angeles River Watershed Management Area							
Los Angeles River Watershed Trash TMDL	2007-012	8/9/2007	2008-0024	4/15/2008	7/1/2008	7/24/2008	9/23/2008
Los Angeles River Nitrogen Compounds and Related Effects TMDL	2003-016	12/4/2003	2004-0014	3/24/2004	9/27/2004	N/A	9/27/2004
Los Angeles River and Tributaries Metals TMDL	R10-003	5/6/2010	2011-0021	4/19/2011	7/28/2011	11/3/2011	11/3/2011
Los Angeles River Bacteria TMDL	R10-007	7/9/2010	2011-0056	11/1/2011	3/21/2012	3/23/2012	3/23/2012
Legg Lake Trash TMDL	2007-010	6/7/2007	2007-0074	12/4/2007	2/5/2008	2/27/2008	3/6/2008
Long Beach City Beaches and Los	N/A	N/A	N/A	N/A	N/A	3/26/2012	N/A

R E V I S E D T E N T A T I V E

TOTAL MAXIMUM DAILY LOAD	RESOLUTION NUMBER	ADOPTION DATE	STATE BOARD RESOLUTION NUMBER	STATE BOARD APPROVAL DATE	OAL APPROVAL DATE	EPA APPROVAL DATE	EFFECTIVE DATE
Angeles River Estuary Bacteria TMDL (USEPA established)							
Los Angeles Area Lakes TMDLs (USEPA established for Lake Calabasas, Echo Park Lake, Legg Lake and Peck Road Park Lake)	N/A	N/A	N/A	N/A	N/A	3/26/2012	N/A
San Gabriel River Watershed Management Area							
San Gabriel River and Impaired Tributaries Metals and Selenium TMDL (USEPA established)	N/A	N/A	N/A	N/A	N/A	3/26/2007	N/A
Los Angeles Area Lakes TMDLs (USEPA established for Puddingstone Reservoir)	N/A	N/A	N/A	N/A	N/A	3/26/2012	N/A
Los Cerritos Channel and Alamitos Bay Watershed Management Area							
Los Cerritos Channel Metals TMDL (USEPA established)	N/A	N/A	N/A	N/A	N/A	3/17/2010	N/A
Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL	R09-005	10/1/2009	2010-0056	11/16/2010	5/6/2011	6/14/2011	7/28/2011
Middle Santa Ana River Watershed Management Area (Santa Ana Region TMDL)							
Middle Santa Ana River Watershed Bacterial Indicator TMDLs	R8-2005-0001	8/26/2005	2006-0030	5/15/2006	9/1/2006	5/16/2007	5/16/2007

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Santa Clara River Watershed Management Area. The Santa Clara River and its tributaries drain a watershed area of 1,634 square miles (sq. miles) (Figure B-1). Santa Clara River Reaches 1, 2, 3, 4A, 4B and major tributaries Santa Paula, Sespe and Piru Creeks are in Ventura County. Santa Clara River Reaches 5, 6, 7, 8 and major tributaries Castaic, San Francisquito, and Bouquet Canyon Creeks are in Los Angeles County. About 40% of the watershed, the Upper Santa Clara River, is located in County of Los Angeles. Approximately, 75% of the Upper Santa Clara River watershed is open space used for recreation in the Angeles National Forest. The remainder of the upper portion of the watershed is characterized by a mixture of residential, mixed urban, and industrial land uses with low density residential more common in the uppermost areas of the watershed, while high density residential is more prevalent in the City of Santa Clarita.

Various reaches of the Santa Clara River are on the 2010 CWA Section 303(d) List of impaired water bodies for nitrogen, bacteria, chloride, and trash (in lakes), among other pollutants. The excess nitrogen compounds are causing impairments to the WARM, WILD, and GWR designated beneficial uses of the Santa Clara River in Reaches 3, 7 and 8. The elevated bacterial indicator densities are causing impairment of the REC-1 and REC-2 designated beneficial uses for the Santa Clara River Estuary and Reaches 3, 5, 6, and 7. The excessive levels of chloride are impairing the AGR and GWR designated beneficial uses of the Upper Santa Clara River Reaches 4A, 4B, 5 and 6. The trash in Lake Elizabeth is causing impairments to the WARM, WILD, RARE, REC-1 and REC-2 designated beneficial uses.

TMDLs have been adopted by the Regional Water Board to address the impairments due to nitrogen, bacteria and chloride in the Upper Santa Clara River Watershed and for trash in Lake Elizabeth. Each of these TMDLs identifies MS4 discharges as a source of pollutants and assigns allocations to MS4 discharges. In the nitrogen compounds TMDL, storm water discharges were identified as potentially contributing nitrogen loads. Data from land use monitoring conducting under the LA County MS4 Permit from 1994-1999 indicate some concentrations of ammonia from commercial land uses in excess of the 30-day average concentration based WLA of 1.75 mg/l, and potential concentrations of nitrate-N and nitrite-N from residential land uses in excess of the WLA of 6.8 mg/l. Recent data from the 2010-11 annual monitoring report indicate low levels of ammonia and nitrite at the mass emissions station (S29) in the Santa Clara River, and concentrations of nitrate-N ranging from 1.38-1.66 mg/l in dry weather and 0.015-1.86 mg/l in wet weather. In the chloride TMDL, major point sources are assigned a WLA of 100 mg/l. Data from land use monitoring conducted under the LA County MS4 Permit from 1994-99 indicate chloride concentrations ranging from 3.2-48 mg/l, while more recent data from the mass emissions station (S29) indicate concentrations ranging from 116-126 mg/l in dry weather, and 25.1-96.3 mg/l in wet weather. For the bacteria TMDL, the Regional Water Board found that the significant contributors of bacteria loading to the Santa Clara River are discharges of storm water and non-storm water from the MS4. For the trash TMDL, discharges from the MS4 are sources of trash discharged to Lake Elizabeth.

Santa Monica Bay Watershed Management Area. The Santa Monica Bay Watershed Management Area (WMA) encompasses an area of 414 sq. miles (Figure B-2). Its

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borders reach from the crest of the Santa Monica Mountains on the north and from the Ventura-Los Angeles County line to downtown Los Angeles. From there it extends south and west across the Los Angeles plain to include the area east of Ballona Creek and north of the Baldwin Hills. A narrow strip of land between Playa del Rey and Palos Verdes drains to the Bay south of Ballona Creek. The WMA includes several subwatersheds, the two largest being Malibu Creek to the north (west) and Ballona Creek to the south. SCAG land use data from 2005 shows 62% of the area is open space, high density residential is 17% of the area, and low density residential is 2.3% of the area. Commercial and industrial land uses total 6% of the area and are found in all but a handful of the subwatersheds.

Many of the Santa Monica Bay beaches were identified on the 1998 CWA Section 303(d) List of impaired water bodies for high coliform counts and beach closures. Santa Monica Bay offshore and nearshore is on the 2010 CWA Section 303(d) List of impaired water bodies for debris, DDTs, PCBs and sediment toxicity. The elevated bacterial indicator densities during both dry and wet weather are causing impairments of the REC-1 and REC-2 designated beneficial uses of the Santa Monica Bay beaches. The debris and elevated concentrations of DDT and PCBs are causing impairments to the IND, NAV, REC-1, REC-2, COMM, EST, MAR, BIOL, MIGR, WILD, RARE, SPWN, SHELL, and WET designated beneficial uses of the Santa Monica Bay.

TMDLs have been adopted by the Regional Water Board and USEPA for bacteria at Santa Monica Bay Beaches, and for debris, DDTs, PCBs and sediment toxicity in Santa Monica Bay. In the bacteria TMDL, the Regional Water Board determined that discharges of storm water and non-storm water from the MS4 are the primary source of elevated bacterial indicator densities to Santa Monica Bay beaches during dry and wet weather. In the debris TMDL, the Regional Water Board determined that most of the land-based debris is discharged to the marine environment through the MS4. In the DDT and PCBs TMDL, USEPA determined that although DDT is no longer used, it persists in the environment, adhering strongly to soil particles. The manufacture of PCBs is no longer legal, but PCBs also persist in the environment and are inadvertently produced as a result of some manufacturing processes. Both DDT and PCBs are transported in contaminated sediments via urban runoff through the MS4 to Santa Monica Bay.

The Malibu Creek subwatershed drains an area of about 109 square miles (Figure B-2a). Approximately two-thirds of this subwatershed lies in Los Angeles County and the remaining third in Ventura County. Much of the land is part of the Santa Monica Mountains National Recreation Area and is under the purview of the National Parks Service. The watershed borders the eastern portion of Ventura County to the west and north and Los Angeles River watershed to the east. Major tributaries include Cold Creek, Lindero Creek, Las Virgenes Creek, Medea Creek, and Triunfo Creek. Located at the end of and receiving flows from Malibu Creek is the 40-acre Malibu Lagoon. The Malibu Creek subwatershed land uses are 88% open space, 3% commercial/light industry, 9% residential and less than 1% public.

The Malibu Creek Watershed is on the 2010 CWA Section 303(d) List of impaired water bodies for bacteria, nutrients, and trash. Elevated bacterial indicator densities are

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causing impairment of the REC-1 and REC-2 designated beneficial uses of Malibu Creek, Malibu Lagoon, and the adjacent beaches. Excess nutrients are causing impairments to the REC-1, REC-2, WARM, COLD, EST, MAR, WILD, RARE, MIGR, and SPWN designated beneficial uses of waterbodies in the Malibu Creek Watershed. Trash is causing impairments to the MUN, GWR, REC-1, REC-2, WARM, COLD, MIGR, WILD, RARE, SPWN, and WET designated beneficial uses of the waterbodies in the Malibu Creek Watershed.

TMDLs have been adopted by the Regional Water Board for bacteria and trash in Malibu Creek. USEPA established a TMDL for nutrients in Malibu Creek. Fecal coliform bacteria may be introduced from a variety of sources including storm water and non-storm water discharges from the MS4. USEPA determined that high nitrogen and phosphorus loadings are associated with storm water discharges from commercial and residential land uses and also from undeveloped areas. During the summer non-storm water discharges add a significant portion of the load. The Regional Water Board determined in the trash TMDL that discharges from the MS4 are a source of trash to waterbodies in the Malibu Creek Watershed.

Ballona Creek and its tributaries drain a subwatershed of about 127 square miles (Figure B-2b). The watershed boundary extends in the east from the crest of the Santa Monica Mountains southward and westward to the vicinity of central Los Angeles and thence to Baldwin Hills. Tributaries of Ballona Creek include Centinela Creek, Sepulveda Canyon Channel, Benedict Canyon Channel, and numerous other storm drains. Ballona Creek is concrete lined upstream of Centinela Boulevard. All of its tributaries are either concrete channels or covered culverts. The channel downstream of Centinela Boulevard is trapezoidal composed of grouted rip-rap side slopes and an earth bottom. The urbanized areas of Ballona Creek, which consists of residential and commercial properties, accounts for 80% of the watershed; the partially developed foothill and mountains make up the other 20%.

Ballona Creek and Ballona Creek Estuary is on the 2010 CWA Section 303(d) List for trash, toxicity, bacteria, and metals. The Ballona Creek Wetlands is on the 2010 CWA Section 303(d) List for trash, exotic vegetation, habitat alterations and hydromodification. Trash is causing impairments to the REC-1, REC-2, WARM, WILD, EST, MAR, RARE, MIGR, SPWN, COMM, WET, and COLD designated beneficial uses of Ballona Creek. A suite of toxic pollutants, including cadmium, copper, lead, silver, zinc, chlordane, DDT, PCBs, and PAHs in sediments and dissolved copper, dissolved lead, total selenium, and dissolved zinc, are causing impairments to the REC-1, REC-2, EST, MAR, WILD, RARE, MIGR, SPWN, COMM, and SHELL designated beneficial uses of Ballona Creek Estuary and Ballona Creek and Sepulveda Channel, respectively. The elevated bacterial indicator densities are causing impairment of the REC-1, LREC-1, and REC-2 designated beneficial uses of Ballona Creek and Ballona Estuary. The excess sediment and invasive exotic vegetation is causing impairments to the EST, MIGR, RARE, REC-1, REC-2, SPWN, WET, and WILD designated beneficial uses of the Ballona Creek Wetlands.

TMDLs have been adopted by the Regional Water Board for trash, metals and toxic pollutants in Ballona Creek and Estuary, and bacteria. USEPA established a TMDL for

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Sediment and Invasive Exotic Vegetation in the Ballona Creek Wetlands. Stormwater discharge is the major source of trash in Ballona Creek. Urban storm water has been recognized as a substantial source of metals. Storm drains convey a large percentage of the metals loadings during dry weather because although their flows are typically low, concentrations of metals in urban runoff may be quite high. Because metals are typically associated with fine particles in storm water runoff, they have the potential to accumulate in estuarine sediments where they may pose a risk of toxicity. Similar to metals, the majority of organic constituents in storm water are associated with particulates. There is toxicity associated with suspended solids in urban runoff discharged from Ballona Creek, as well as with the receiving water sediments. This toxicity is likely attributed to metals and organics associated with the suspended sediments. The major contributors of flows and associated bacteria loading to Ballona Creek and Ballona Estuary are storm water and non-storm water discharges from the MS4. The potential for sediment loading into the Ballona Creek Wetlands is associated with the flow coming down the watershed. Sediment moves from the watershed through the MS4 as a result of storms, wind and land based runoff. Major storms usually take place in winter and are responsible for major movements of sediment down the watershed into Ballona Creek and Ballona Wetland towards the coastal waterbodies. These activities can lead to discharge of large quantities of sediments in runoff.

The Marina del Rey subwatershed is approximately 2.9 square miles located adjacent to the mouth of Ballona Creek. The Marina del Rey subwatershed is highly developed at 80%, the remaining 20% is split between water and open/recreation land uses.

Marina del Rey is on the 2010 CWA Section 303(d) List for bacteria and sediment concentrations of copper, lead, zinc, DDT, PCBs, chlordanes, and sediment toxicity. The elevated bacterial indicator densities are causing impairment of the REC-1 and REC-2 designated beneficial uses at Marina del Rey Harbor Mothers' Beach and back basins. The toxic pollutants are causing impairments to the REC-1, MAR, WILD, COMM, and SHELL designated beneficial uses of the Marina del Rey Harbor.

TMDLs have been adopted by the Regional Water Board for bacteria and toxic pollutants. Non-storm water and storm water discharges from the MS4 are the primary sources of elevated bacterial indicator densities to Marina del Rey Harbor Mothers' Beach and back basins during dry and wet weather. Urban storm water has been recognized as a substantial source of metals. Numerous researchers have documented that the most prevalent metals in urban storm water (i.e., copper, lead, and zinc) are consistently associated with suspended solids. Because metals are typically associated with fine particles in storm water runoff, they have the potential to accumulate in marine sediments where they may pose a risk of toxicity. Similar to metals, the majority of organic constituents in storm water are associated with particulates.

On June 7, 2012, the Regional Water Board adopted revised Basin Plan Amendments (BPAs) for the Santa Monica Bay Beaches Bacteria TMDL; the Malibu Creek and Lagoon Bacteria TMDL; the Ballona Creek, Ballona Estuary, and Sepulveda Channel Bacteria TMDL; and the Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL. In the revised TMDLs the method of calculating the geometric mean was changed from the existing methods in the current Bacteria TMDLs and the

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allowable winter dry weather exceedance days was redefined. Although, the revised BPAs are not in effect until approved by the State Board, OAL and USEPA these changes have been included in the Permit and will become effective upon the effective dates of the revised Bacteria TMDLs.

Dominguez Channel and Greater Harbor Waters Watershed Management Area.

The Dominguez Channel and Los Angeles/Long Beach Harbors Watershed Management Area (Dominguez WMA) is located in the southern portion of the Los Angeles Basin (Figure B-3). Los Angeles Harbor is 7,500 acres and the Long Beach Harbor is 7,600 acres; together they have an open water area of approximately 8,128 acres. The 15 mile-long Dominguez Channel drains a densely urbanized area to Inner Los Angeles Harbor. Near the end of the 19th century and during the beginning of the next century, channels were dredged, marshes were filled, wharves were constructed, the Los Angeles River was diverted, and breakwaters were constructed in order to allow deep draft ships to be directly offloaded at the docks. The Dominguez Slough was completely channelized and became the drainage endpoint for runoff from a highly industrialized area. Eventually, the greater San Pedro Bay was enclosed by two more breakwaters and deep entrance channels were dredged to allow for entry of ships.

Various reaches of the Dominguez WMA are on the 2010 CWA Section 303(d) List of impaired water bodies for metals, DDT, PCBs, PAHs, historic pesticides, coliform, and sediment toxicity. The elevated bacteria indicator densities is causing impairments to the SHELL, REC-1, and REC-2 designated beneficial uses of Los Angeles Harbor. The elevated levels of metals and organics are causing impairments to beneficial uses designated in these waters to protect aquatic life, including MAR and RARE. In addition, the elevated levels are causing impairments in the estuaries, which are designated with SPWN, MIGR, and WILD beneficial uses. Dominguez Channel also has an existing designated use of WARM and the Los Angeles River Estuary has the designated use of WET. Beneficial uses associated with human use of these waters that are impaired due to the elevated concentrations of metals and organics include REC-1, REC-2, IND, NAV, COMM, and SHELL.

TMDLs have been adopted by the Regional Water Board for toxic pollutants in the Dominguez WMA and for bacteria at Inner Cabrillo Beach and the Main Ship Channel. Discharges from the MS4 are a source of elevated bacterial indicator densities to Inner Cabrillo Beach and the Main Ship Channel during dry and wet weather. The major point sources of organochlorine pesticides, PCBs, and metals into Dominguez Channel are storm water and non-storm water discharges. The contaminated sediments are a reservoir of historically deposited pollutants. Storm water runoff from manufacturing, military facilities, fish processing plants, wastewater treatment plants, oil production facilities, and shipbuilding or repair yards in both Ports have discharged untreated or partially treated wastes into Harbor waters. Current activities also contribute pollutants to Harbor sediments, in particular, storm water runoff.

On June 7, 2012, the Regional Water Board adopted a revised Basin Plan Amendment (BPA) for the Los Angeles Harbor Inner Cabrillo Beach and Main Ship Channel Bacteria TMDL. In the revised TMDL the method of calculating the geometric mean was changed from the existing methods in the current Bacteria TMDL and the allowable

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winter dry weather exceedance days was redefined. Although, the revised BPA is not in effect until approved by the State Board, OAL and USEPA these changes have been included in the Permit and will become effective upon the effective date of the revised Bacteria TMDL.

Machado Lake is listed for trash, nutrients, PCBs and historic pesticides. Trash, nutrients and toxic pollutants are causing impairments to the WARM, WET, RARE, WILD, REC-1 and REC-2 designated beneficial uses of Machado Lake. TMDLs have been adopted by the Regional Water Board for trash, nutrients, PCBs and pesticides for Machado Lake. The point sources of trash and nutrients into Machado Lake are storm water and non-storm water discharges from the MS4. Storm water discharges occur through the following sub-drainage systems: Drain 553, Wilmington Drain, Project 77/510, and Walteria Lake.

Los Angeles River Watershed Management Area. The Los Angeles River Watershed Management Area (LAR WMA) drains a watershed of 824 square miles (Figure B-4). The LAR WMA is one of the largest in the Region and is also one of the most diverse in terms of land use patterns. Approximately 324 square miles of the watershed are covered by forest or open space land including the area near the headwaters, which originate in the Santa Monica, Santa Susana, and San Gabriel Mountains. The remainder of the watershed is highly developed. The river flows through the San Fernando Valley past heavily developed residential and commercial areas. From the Arroyo Seco, north of downtown Los Angeles, to the confluence with the Rio Hondo, the river flows through industrial and commercial areas and is bordered by rail yards, freeways, and major commercial and government buildings. From the Rio Hondo to the Pacific Ocean, the river flows through industrial, residential, and commercial areas, including major refineries and petroleum products storage facilities, major freeways, rail lines, and rail yards serving the Ports of Los Angeles and Long Beach. Due to major flood events at the beginning of the century, by the 1950s most of the LA River was lined with concrete. In the San Fernando Valley, there is a section of the river with a soft bottom at the Sepulveda Flood Control Basin. At the eastern end of the San Fernando Valley, the river bends around the Hollywood Hills and flows through Griffith and Elysian Parks, in an area known as the Glendale Narrows. Since the water table was too high to allow laying of concrete, the river in this area has a rocky, unlined bottom with concrete-lined or rip-rap sides. South of the Glendale Narrows, the river is contained in a concrete-lined channel down to Willow Street in Long Beach. The LA River tidal prism/estuary begins in Long Beach at Willow Street and runs approximately three miles before joining with Queensway Bay. The channel has a soft bottom in this reach with concrete-lined sides. A number of lakes are also part of the LAR WMA, including Legg Lake, Peck Road Park, Belvedere Park, Hollenbeck Park, Lincoln Park, and Echo Park Lakes as well as Lake Calabasas.

Various reaches and lakes within the LAR WMA are on the 2010 CWA Section 303(d) List of impaired water bodies for trash, nitrogen compounds and related effects (ammonia, nitrate, nitrite, algae, pH, odor, and scum), metals (copper, cadmium, lead, zinc, aluminum and selenium), bacteria, and historic pesticides. Beneficial uses impaired by trash in the Los Angeles River are REC-1, REC-2, WARM, WILD, EST, MAR, RARE, MIGR, SPWN, COMM, WET and COLD. The excess nitrogen compounds

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are causing impairments to the WARM and WILD designated beneficial uses of Los Angeles River. Excess metals are causing impairments to the WILD, RARE, WARM, WET, and GWR designated beneficial uses of the Los Angeles River and its tributaries. Elevated indicator bacteria densities are causing impairments to the REC-1 and REC-2 designated beneficial uses of Los Angeles River and the Los Angeles River Estuary. Beneficial uses impaired by trash in Legg Lake include REC1, REC2, and WILD.

TMDLs have been adopted by the Regional Water Board for trash, nitrogen, metals, and bacteria in the Los Angeles River. USEPA established TMDLs for bacteria in the Los Angeles River Estuary and for various pollutants in Los Angeles Area Lakes. The Los Angeles River Watershed Trash TMDL identifies discharges from the municipal separate storm sewer system as the principal source of trash to the Los Angeles River and its tributaries. The Regional Water Board determined that urban runoff and storm water may contribute to nitrate loads. Discharges from the MS4 contribute a large percentage of the metals loadings during dry weather because although non-storm water flows from the MS4 are typically low relative to other discharges during dry weather, concentrations of metals in urban runoff may be quite high. During wet weather, most of the metals loadings are in the particulate form and are associated with wet-weather storm water flow. On an annual basis, storm water discharges from the MS4 contribute about 40% of the cadmium loading, 80% of the copper loading, 95% of the lead loading, and 90% of the zinc loading. Discharges from the MS4 are the principal source of bacteria to the Los Angeles River, its tributaries and the Los Angeles River Estuary in both dry weather and wet weather.

A TMDL has been adopted by the Regional Water Board for trash in Legg Lake. The Legg Lake Trash TMDL identifies MS4 storm drains as the principal point source for trash discharged to Legg Lake.

The Los Angeles Water Board identified 10 lakes in the Los Angeles region as impaired by algae, ammonia, chlordane, copper, DDT, eutrophication, lead, organic enrichment/low dissolved oxygen, mercury, odor, PCBs, pH and/or trash and placed them on California's 303(d) list of impaired waters. For several lakes, USEPA concluded that ammonia, pH, copper and/or lead are currently meeting water quality standards and TMDLs are not required at this time. In other lakes, recent chlordane and dieldrin data indicate additional impairment. Associated with this WMA are: Lake Calabazas TMDLs for total nitrogen and total phosphorus; Echo Park Lake TMDLs for nutrients (total nitrogen and total phosphorus), total chlordane, dieldrin, total PCBs, and trash; Legg Lake TMDLs for total nitrogen and total phosphorus; and Peck Road Park Lake TMDLs for nutrients (total nitrogen and total phosphorus), total chlordane, total DDT, dieldrin, total PCBs, and trash.

In Lake Calabazas beneficial uses impaired by elevated levels of nutrients include REC1, REC2, and WARM. At high enough concentrations, WILD and MUN uses could also become impaired. MS4 discharges from the surrounding watershed to Lake Calabazas during dry and wet weather contributes 97.7 percent of the total phosphorus load and 74.4 percent of the total nitrogen load.

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In Echo Park Lake beneficial uses impaired by elevated levels of nutrients, PCBs, chlordane, and dieldrin are currently impairing the REC1, REC2, and WARM uses. At high enough concentrations WILD and MUN uses could also become impaired. Beneficial uses impaired by trash in Echo Park Lake include REC1, REC2, WARM and WILD. The Echo Park Lake nutrient TMDL found that MS4 discharges from the northern and southern watershed to Echo Lake contribute 29 percent of the total phosphorus load and 28 percent of the total nitrogen load during wet weather with dry weather loading data unavailable due to the majority of runoff being diverted downstream of the lake. PCBs, chlordane, and dieldrin in Echo Park Lake are primarily due to historical loading and storage within the lake sediments, with some ongoing contribution by watershed wet weather loads. Dry weather loading is assumed to be negligible because hydrophobic contaminants primarily move with particulate matter that is mobilized by higher flows. Storm water loads from the watershed were estimated based on simulated sediment load and observed pollutant concentrations on sediment near inflows to the lake. MS4 discharges via storm drains are the principal point source for trash in Echo Park Lake.

In Legg Lake beneficial uses impaired due to elevated nutrient levels include REC1, REC2, WARM and COLD. At high enough concentrations the WILD, MUN, and GWR uses could also become impaired. The Legg Lake nutrient TMDL found that MS4 discharges from the surrounding watershed to Legg Lake during dry and wet weather contributes 69.1 percent of the total phosphorus load and 36 percent of the total nitrogen load.

In Peck Road Park Lake beneficial uses impaired by elevated levels of nutrients, PCBs, chlordane, DDT, dieldrin, and trash are currently impairing the REC1, REC2, and WARM uses. At high enough concentrations WILD and MUN uses could also become impaired. The Peck Road Park Lake nutrient TMDL found that MS4 discharges from the surrounding watershed including both wet and dry weather contribute 80.2 percent of the total phosphorus load and 55.5 percent of the total nitrogen load. PCBs, chlordane, DDT, and dieldrin in Peck Road Park Lake loads are primarily due to historical loading and storage within the lake sediments, with some ongoing contribution by watershed wet weather loads. Dry weather loading is assumed to be negligible because hydrophobic contaminants primarily move with particulate matter that is mobilized by higher flows. Stormwater loads from the watershed were estimated based on simulated sediment load and observed pollutant concentrations on sediment near inflows to the lake. MS4 discharges via storm drains are the principal point source for trash in Peck Road Park Lake.

San Gabriel River Watershed Management Area. The San Gabriel River Watershed (SGR WMA) receives drainage from a 689-square mile area of eastern Los Angeles County (Figure B-5). The main channel of the San Gabriel River is approximately 58 miles long. Its headwaters originate in the San Gabriel Mountains with the East, West, and North Forks. The river empties to the Pacific Ocean at the Los Angeles and Orange Counties boundary in Long Beach. The main tributaries of the river are Big and Little Dalton Wash, San Dimas Wash, Walnut Creek, San Jose Creek, Fullerton Creek, and Coyote Creek. Part of the Coyote Creek subwatershed is in Orange County and is under the authority of the Santa Ana Water Board. A number of lakes and reservoirs

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are also part of the SGR WMA, including Puddingstone Reservoir. Land use in the watershed is diverse and ranges from predominantly open space in the upper watershed to urban land uses in the middle and lower parts of the watershed.

Various reaches of the SGR WMA are on the 2010 CWA Section 303(d) List of impaired water bodies due to trash, nitrogen, phosphorus, and metals (copper, lead, selenium, and zinc). USEPA established TMDLs for metals and selenium in the San Gabriel River and various pollutants in Los Angeles Area Lakes. Segments of the San Gabriel River and its tributaries exceed water quality objectives for copper, lead, selenium, and zinc. Metals loadings to San Gabriel River are causing impairments of the WILD, WARM, COLD, RARE, EST, MAR, MIGR, SPWN, WET, MUN, IND, AGR, GWR, and PROC beneficial uses. The San Gabriel River metals and selenium TMDL found that the MS4 contributes a large percentage of the metals loadings during dry weather because although their flows are typically low, concentrations of metals in urban runoff may be quite high. During wet weather, most of the metals loadings are in the particulate form and are associated with wet-weather storm water flow.

The Regional Water Board identified 10 lakes in the Los Angeles Region as impaired by algae, ammonia, chlordane, copper, DDT, eutrophication, lead, organic enrichment/low dissolved oxygen, mercury, odor, PCBs, pH and/or trash and placed them on California's 303(d) list of impaired waters. For several lakes, USEPA concluded that ammonia, pH, copper and/or lead are currently meeting water quality standards and TMDLs are not required at this time. In other lakes, recent chlordane and dieldrin data indicate additional impairment. Associated with this WMA is: Puddingstone Reservoir TMDLs for total nitrogen, total phosphorus, total chlordane, total DDT, total PCBs, total mercury, and dieldrin.

In Puddingstone Reservoir beneficial uses impaired due to elevated nutrient, mercury, PCBs, chlordane, dieldrin, and DDT levels include REC1, REC2, WARM, and COLD. At high enough concentrations the WILD, MUN, GWR, and RARE uses could also become impaired. The Puddingstone Reservoir nutrients TMDL found that MS4 discharges from the surrounding watershed to Puddingstone Reservoir during dry and wet weather contributes 79.8 percent of the total phosphorus and 74.1 percent of the total nitrogen load. Mercury, PCBs, chlordane, dieldrin, and DDT in Puddingstone Reservoir loads are primarily due to historical loading and storage within the lake sediments, with some ongoing contribution by watershed wet weather loads. Dry weather loading is assumed to be negligible because hydrophobic contaminants primarily move with particulate matter that is mobilized by higher flows. Stormwater loads from the watershed were estimated based on simulated sediment load and observed pollutant concentrations on sediment near inflows to the lake.

Los Cerritos Channel and Alamitos Bay Watershed Management Area. The Los Cerritos Channel is concrete-lined above the tidal prism and drains a small but densely urbanized area of east Long Beach (Figure B-6). The channel's tidal prism starts at Anaheim Road and connects with Alamitos Bay through the Marine Stadium; the wetlands connect to the Channel a short distance from the lower end of the Channel. Alamitos Bay is composed of the Marine Stadium, a recreation facility built in 1932; Long Beach Marina; a variety of public and private berths; and the Bay proper. A small

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bathing lagoon, Colorado Lagoon located entirely in Long Beach, has a tidal connection with the Bay. The majority of land use in this WMA is high density residential.

Los Cerritos Channel is on the 2010 CWA Section 303(d) List of impaired water bodies for metals (copper, zinc, and lead). Beneficial uses impaired by metals in the Los Cerritos Channel include WILD, REC2 and WARM. USEPA established a TMDL for various metals in Los Cerritos Channel. The TMDL for metals in Los Cerritos Channel found that the MS4 contributes a large percentage of the metals loadings during dry weather because although their flows are typically low, concentrations of metals in urban runoff may be quite high. During wet weather, most of the metals loadings are in the particulate form and are associated with wet-weather storm water flow.

Middle Santa Ana River Watershed Management Area. The Middle Santa Ana River Watershed Management Area (MSAR WMA) covers approximately 488 square miles ([mi²](#)) and lies mostly in San Bernardino and Riverside Counties; however, a small part of Los Angeles County is also included. The area of Los Angeles County, which lays in the MSAR WMA, includes portions of the Cities of Pomona ([12.3 mi²](#)), and Claremont ([8.4 mi²](#)), and Diamond Bar ([0.7 mi²](#)) and unincorporated Los Angeles County ([12.3 mi²](#)) (Figure B-7). The MSAR WMA is comprised of three subwatersheds. The subwatershed that includes portions of Pomona and Claremont is the Chino Basin Subwatershed. Surface drainage from Pomona and Claremont is generally southward toward San Antonio Creek, which is tributary to Chino Creek, which feeds into the Prado Flood Control Basin.

Various reaches of the MSAR WMA, including Chino Creek, are listed on 2010 CWA Section 303(d) List for bacteria. Elevated bacterial indicator densities are causing impairments of the REC-1 and REC-2 designated beneficial for the Santa Ana River Reach 3; Chino Creek Reaches 1 and 2; Mill Creek (Prado Area); Cucamonga Creek Reach 1; and Prado Park Lake.

The Santa Ana Water Board adopted TMDLs for bacteria for the Middle Santa Ana River Watershed. The Basin Plan amendment incorporating the Middle Santa Ana River Watershed Bacterial Indicator TMDLs was approved by the Santa Ana Water Board on August 26, 2005 (Resolution No. R8-2005-0001), by the State Water Board on May 15, 2006, by the Office of Administrative Law on September 1, 2006, and by the USEPA on May 16, 2007. The TMDL was effective on May 16, 2007. The Santa Ana Water Board concluded based upon data and information collected in 1993, 1996-1998 and in 2002-2004, that urban runoff from the MS4 is a significant source of bacterial indicators year round to the Middle Santa Ana River and its tributaries (Rice, 2005). The TMDL specifies both dry weather and wet weather WLAs, with distinct implementation schedules. Compliance with the summer dry (April 1st through October 31st) WLAs is to be achieved as soon as possible, but no later than December 31, 2015. In recognition of the difficulties associated with the control of storm water discharges, compliance with the winter wet (November 1st through March 31st) WLAs is to be achieved as soon as possible, but no later than December 31, 2025. The MS4 permit allows for discharges [of bacteria](#) from the MS4s of the Cities of Claremont and Pomona to be regulated to ensure compliance with the wasteload allocations set forth in the Middle Santa Ana Bacterial Indicator TMDL [and with the corresponding receiving water limitations](#) by the

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terms of an NPDES permit issued by the Santa Ana Regional Water Quality Control Board that is applicable to such MS4 discharges. The NPDES permit must be issued pursuant to a designation agreement between the Los Angeles and Santa Ana Regional Boards under Water Code § 13228. In the absence of such an NPDES permit, the MS4 permit includes specific provisions in Attachment R that are consistent with the assumptions and requirements of the wasteload allocations applicable to MS4 discharges as set forth in the Middle Santa Ana Bacterial Indicator TMDL.

Calleguas Creek Watershed Management Area. Calleguas Creek and its tributaries drain a watershed area of 343 square miles (sq. miles) in southern Ventura County and a small portion of western Los Angeles County. Approximately, 4.16 sq. miles of Los Angeles County is part of the Calleguas Creek Watershed. The land use of the 4.15 sq. miles is open space and recreation. The land use of the remaining 0.01 sq. miles is divided between low density residential, industrial, and agriculture (Southern California Association of Governments, 2008). Six TMDLs have been adopted and are in effect for the Calleguas Creek Watershed. None of the TMDLs assign waste load allocations to the Los Angeles County Flood Control District, County of Los Angeles or any incorporated city within Los Angeles County. Therefore, no water quality based effluent limitations were incorporated in this Order for TMDLs in the Calleguas Creek Watershed.

Manner of Incorporation of TMDL WLAs. The description of the permit conditions and the basis for the manner for incorporating requirements to implement the TMDLs' WLAs is discussed below.

WLAs may be expressed in different ways in a TMDL. In general, a WLA is expressed as a discharge condition that must be achieved in order to ensure that water quality standards are attained in the receiving water. The discharge condition may be expressed in terms of mass or concentration of a pollutant. However, in some cases, a WLA may be expressed as a receiving water condition such as an allowable number of exceedance days of the bacteria objectives.

In this Order, in most cases, TMDL WLAs have been translated into numeric WQBELs and, where consistent with the expression of the WLA in the TMDL, also as receiving water limitations. For each TMDL included in this Order, the WLA were translated into numeric WQBELs, which were based on the WLAs in terms of the numeric value and averaging period. For those TMDLs where the averaging period was not specific for the WLA, the averaging period was based on the averaging period for the numeric target.

For the bacteria TMDLs, where the WLA are expressed as an allowable number of exceedance days in the water body, the WLAs were translated into receiving water limitations. In addition to the receiving water limitations, WQBELs were established based on the bacteria water quality objectives. In the bacteria TMDLs, the numeric targets are based on the multi-part bacteriological water quality objectives; therefore, this approach is consistent with the assumptions of the bacteria TMDLs.

In the Ballona Creek Trash TMDL, the default baseline WLA for the MS4 Permittees is equal to 640 gallons (86 cubic feet) of uncompressed trash per square mile per year.

No differentiation is applied for different land uses in the default baseline WLA. The default baseline WLAs for the Permittees has been refined based on results from the baseline monitoring conducted by the City of Los Angeles. The City of Los Angeles provided trash generation flux data for five land uses: commercial, industrial, high density residential, low density residential and open space and recreation. The Baseline WLA for any single city is the sum of the products of each land use area multiplied by the WLA for the land use area, as shown below:

$$\text{WLA} = \sum \text{for each city (area by land uses} \times \text{allocations for this land use)}$$

The baseline was calculated using the City of Los Angeles trash generation flux data provided for the 2003-04 and 2004-05 storm years averaged for pounds of trash per acre and the 2003-04 storm year for gallons of trash per acre. The urban portion of the Ballona Creek watershed was divided into twelve types of land uses for every city and unincorporated area in the watershed. The land use categories are: (1) high density residential, (2) low density residential, (3) commercial and services, (4) industrial, (5) public facilities, (6) educational institutions, (7) military installations, (8) transportation, (9) mixed urban, (10) open space and recreation, (11) agriculture, and (12) water. The land use data used in the calculation is based on the Southern California Association of Governments 2005 data.

1. Compliance Determination

For TMDLs that establish individual mass-based WLAs or a concentration-based WLA such as the Trash TMDLs, Nitrogen TMDLs, and Chloride TMDL, this Order requires Permittees to demonstrate compliance with their assigned WQBELs individually.

A number of the TMDLs for Bacteria, Metals and Toxics establish WLAs that are assigned jointly to a group of Permittees whose storm water and/or non-storm water discharges are or may be commingled in the MS4 prior to discharge to the receiving water subject to the TMDL. TMDLs address commingled MS4 discharges by assigning a WLA to a group of MS4 Permittees based on co-location within the same subwatershed. Permittees with co-mingled storm water are jointly responsible for meeting the WQBELs and receiving water limitations assigned to MS4 discharges in this Order. "Joint responsibility" means that the Permittees that have commingled MS4 discharges are responsible for implementing programs in their respective jurisdictions, or within the MS4 for which they are an owner or operator, to meet the WQBELs and/or receiving water limitations assigned to such commingled MS4 discharges.

In these cases, federal regulations state that co-permittees need only comply with permit conditions relating to discharges from the MS4 for which they are owners or operators. (40 CFR § 122.26(a)(3)(vi).) Individual co-permittees are only responsible for their contributions to the commingled discharge. This Order does not require a Permittee to individually ensure that a commingled MS4 discharge meets the applicable WQBELs included in this Order, unless such Permittee is shown to be solely responsible for the exceedances.

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Additionally, this Order allows a Permittee to clarify and distinguish their individual contributions and demonstrate that its MS4 discharge did not cause or contribute to exceedances of applicable WQBELs and/or receiving water limitations. In this case, though the Permittee's discharge may commingle with that of other Permittees, the Permittee would not be held jointly responsible for the exceedance of the WQBELs or receiving water limitation.

Individual co-permittees who demonstrate compliance with the WQBELs will not be held responsible for violations by non-compliant co-permittees.

Demonstrating Compliance with Interim Limitations. This Order provides Permittees with several means of demonstrating compliance with applicable interim WQBELs and/or interim receiving water limitations for the pollutant(s) associated with a specific TMDL. These include any of the following:

- a. There are no violations of the interim WQBELs for the pollutant(s) associated with a specific TMDL at the Permittee's applicable MS4 outfall(s) or access points,¹ including an outfall to the receiving water that collects discharges from multiple Permittees' jurisdictions;
- b. There are no exceedances of the applicable receiving water limitation for the pollutant(s) associated with a specific TMDL in the receiving water(s) at, or downstream of, the Permittee's outfall(s);
- c. There is no direct or indirect discharge from the Permittee's MS4 to the receiving water during the time period subject to the WQBEL and/or receiving water limitation for the pollutant(s) associated with a specific TMDL; or
- d. The Permittee has submitted and is fully implementing an approved Watershed Management Program or Enhanced Watershed Management Program (EWMP), which includes analyses that provide the Regional Water Board with reasonable assurance that the watershed control measures proposed will achieve the applicable WQBELs and receiving water limitations consistent with relevant compliance schedules.

Demonstrating Compliance with Final Limitations. This Order provides Permittees with three general means of demonstrating compliance with an applicable *final* WQBEL and/or *final* receiving water limitation for the pollutant(s) associated with a specific TMDL.

These include any of the following:

- a. There are no violations of the final WQBEL for the specific pollutant at the Permittee's applicable MS4 outfall(s)²;

¹ An outfall-access point may include a manhole or other point of access to the MS4 at the Permittee's jurisdictional boundary.

² Ibid.

- b. There are no exceedances of applicable receiving water limitation for the specific pollutant in the receiving water(s) at, or downstream of, the Permittee's outfall(s);
or
- c. There is no direct or indirect discharge from the Permittee's MS4 to the receiving water during the time period subject to the WQBEL and/or receiving water limitation for the pollutant(s) associated with a specific TMDL; or
- e.d. In drainage areas where Permittees are implementing an EWMP, (i) all non-storm water and (ii) all storm water runoff up to and including the volume equivalent to the 85th percentile, 24-hour event is retained for the drainage area tributary to the applicable receiving water. This compliance mechanism does not apply to final trash WQBELs.

This Order provides the opportunity for Permittees to demonstrate compliance with *interim* effluent limitations through development and implementation of a Watershed Management Program or EWMP, where Permittees have provided a reasonable demonstration through quantitative analysis (i.e., modeling or other approach) that the control measures/BMPs to be implemented will achieve the interim effluent limitations in accordance with the schedule provided in this Order. It is premature to consider application of this action based compliance demonstration option to the final effluent limitations and final receiving water limitations that have deadlines outside the term of this Order. More data is needed to validate assumptions and model results regarding the linkage among BMP implementation, the quality of MS4 discharges, and receiving water quality.

During the term of this Order, there are very few deadlines for compliance with final effluent limitations applicable to storm water, or final receiving water limitations applicable during wet weather conditions. Most deadlines during the term of this Order are for interim effluent limitations applicable to storm water, or for final effluent limitations applicable to non-storm water discharges and final dry weather receiving water limitations.

There are only five State-adopted TMDLs for which the compliance deadlines for final water quality-based effluent limitations applicable to storm water occur during the term of this Order. These include: Santa Clara River Chloride TMDL, Santa Clara River Nitrogen TMDL, Los Angeles River Nitrogen TMDL, Marina del Rey Harbor Toxics TMDL, and LA Harbor Bacteria TMDL. In most of these five TMDLs, compliance with the final water quality-based effluent limitations assigned to MS4 discharges is expected to be achieved (e.g., Santa Clara River Chloride TMDL³), or a mechanism is in place to potentially allow additional time to come into compliance (e.g. reconsideration of the Marina del Rey Harbor Toxics TMDL implementation schedule).

³ Data from land use monitoring conducted under the LA County MS4 Permit from 1994-99 indicate chloride concentrations ranging from 3.2-48 mg/L, while more recent data from the mass emissions station in the Santa Clara River (S29) indicate concentrations ranging from 116-126 mg/l in dry weather, and 25.1-96.3 mg/l in wet weather, suggesting that storm water has a diluting effect on chloride concentrations in the receiving water.

The Regional Water Board will evaluate the effectiveness of this action-based compliance determination approach in ensuring that interim effluent limitations for storm water are achieved during this permit term. If this approach is effective in achieving compliance with interim effluent limitations for storm water during this permit term, the Regional Water Board will consider during the next permit cycle whether it would be appropriate to allow a similar approach for demonstrating compliance with final water quality-based effluent limitations applicable to storm water. The Order includes a specific provision to support reopening the permit to include provisions or modifications to WQBELs in Part VI.E and Attachments L-R in this Order prior to the final compliance deadlines, if practicable, that would allow an action-based, BMP compliance demonstration approach with regard to final WQBELs for storm water discharges based on the Regional Board's review of relevant research, including but not limited to data and information provided by Permittees, on storm water quality and control technologies

2. Compliance Schedules for Achieving TMDL Requirements

A Regional Water Board may include a compliance schedule in an NPDES permit when the state's water quality standards or regulations include a provision that authorizes such schedules in NPDES permits.⁴ In California, TMDL implementation plans⁵ are typically adopted through Basin Plan Amendments. The TMDL implementation plan, which is part of the Basin Plan Amendment, becomes a regulation upon approval by the State of California Office of Administrative Law (OAL).⁶ Pursuant to California Water Code sections 13240 and 13242, TMDL implementation plans adopted by the Regional Water Board "shall include ... a time schedule for the actions to be taken [for achieving water quality objectives]," which allows for compliance schedules in future permits. This Basin Plan Amendment becomes the applicable regulation that authorizes an MS4 permit to include a compliance schedule to achieve effluent limitations derived from wasteload allocations.

Where a TMDL implementation schedule has been established through a Basin Plan Amendment, it is incorporated into this Order as a compliance schedule to achieve interim and final WQBELs and corresponding receiving water limitations, in accordance with 40 CFR section 122.47. WQBELs must be consistent with the assumptions and requirements of any WLA, which includes applicable implementation schedules.⁷ California Water Code sections 13263 and 13377 state that waste discharge requirements must implement the Basin Plan.⁸ Therefore,

⁴ See *In re Star-Kist Caribe, Inc.*, (Apr. 16, 1990) 3 E.A.D. 172, 175, modification denied, 4 E.A.D. 33, 34 (EAB 1992)).

⁵ TMDL implementation plans consist of those measures, along with a schedule for their implementation, that the Water Boards determine are necessary to correct an impairment. The NPDES implementation measures are thus required by sections 303(d) and 402(p)(3)(B)(iii) of the CWA. State law also requires the Water Boards to implement basin plan requirements. (See Wat. Code §§ 13263, 13377; *State Water Resources Control Board Cases* (2006) 136 Cal.App.4th 189.)

⁶ See Gov. Code, § 11353, subd. (b). Every amendment to a Basin Plan, such as a TMDL and its implementation plan, requires approval by the State Water Board and OAL. When the TMDL and implementation plan is approved by OAL, it becomes a state regulation.

⁷ See 40 C.F.R. § 122.44(d)(1)(vii)(B).

⁸ Cal. Wat. Code, § 13263, subd. (a) ("requirements shall implement any relevant water quality control plans that have been adopted"); Cal. Wat. Code, § 13377 ("the state board or the regional boards shall . . . issue waste discharge requirements and dredged or fill material permits which apply and ensure compliance with all applicable provisions of the [CWA], thereto,

compliance schedules for attaining WQBELs derived from WLAs must be based on a state-adopted TMDL implementation plan and cannot exceed the maximum time that the implementation plan allows.

In determining the compliance schedules, the Regional Water Board considered numerous factors to ensure that the schedules are as short as possible. Factors examined include, but are not limited to, the size and complexity of the watershed; the pollutants being addressed; the number of responsible agencies involved; time for Co-Permittees to negotiate memorandum of agreements; development of water quality management plans; identification of funding sources; determination of an implementation strategy based on the recommendations of water quality management plans and/or special studies; and time for the implementation strategies to yield measurable results. Compliance schedules may be altered based on the monitoring and reporting results as set forth in the individual TMDLs.

In many ways, the incorporation of interim and final WQBELs and associated compliance schedules is consistent with the iterative process of implementing BMPs that has been employed in the previous Los Angeles County MS4 Permits in that progress toward compliance with the final effluent limitations may occur over the course of many years. However, because the waterbodies in Los Angeles County are impaired due to MS4 discharges, it is necessary to establish more specific provisions in order to: (i) ensure measurable reductions in pollutant discharges from the MS4, resulting in progressive water quality improvements during the iterative process, and (ii) establish a final date for completing implementation of BMPs and, ultimately, achieving effluent limitations and water quality standards.

The compliance schedules established in this Order are consistent with the implementation plans established in the individual TMDLs. The compliance dates for meeting the final WQBELs and receiving water limitations for each TMDL are listed below in Table F-7.

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together with any more stringent effluent standards or limitations necessary to implement waste quality control plans, or for the protection of beneficial uses, or to prevent nuisance"); *see also, State Water Resources Control Board Cases* (2006) 136 Cal.App.4th 189.

Table F-7. Compliance Schedule for final compliance dates.

	Final Compliance date has Passed	Final Compliance date within 5 years (2012-2017)	Final Compliance date between 5 and 10 years (2018-2022)	Final Compliance date after 10 years (2023)
TOTAL MAXIMUM DAILY LOADS (TMDL)				
Santa Clara River Nitrogen Compounds TMDL	March 23, 2004			
Upper Santa Clara River Chloride TMDL	April 6, 2010			
Lake Elizabeth, Munz Lake, and Lake Hughes Trash TMDL (Lake Elizabeth only)		March 6, 2016		
Santa Clara River Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL				
Dry Weather				March 21, 2023
Wet Weather				March 21, 2029
Santa Monica Bay Beaches Bacteria TMDL				
Summer Dry Weather	July 15, 2006			
Winter Dry Weather	July 15, 2009			
Wet Weather			July 15, 2021	
Santa Monica Bay Nearshore and Offshore Debris TMDL			March 20, 2020	
Santa Monica Bay TMDL for DDTs and PCBs (USEPA established)		March 26, 2012		
Malibu Creek and Lagoon Bacteria TMDL				
Summer Dry Weather	January 24, 2009			
Winter Dry Weather	January 24, 2012			
Wet Weather			July 15, 2021	
Malibu Creek Watershed Trash TMDL		July 7, 2017		
Malibu Creek Watershed Nutrients TMDL (USEPA established)	March 21, 2003			
Ballona Creek Trash TMDL		September 30, 2015		
Ballona Creek Estuary Toxic Pollutants TMDL			January 11, 2021	
Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL				
Dry Weather		April 27, 2013		
Wet Weather			July 15, 2021	

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	Final Compliance date has Passed	Final Compliance date within 5 years (2012-2017)	Final Compliance date between 5 and 10 years (2018-2022)	Final Compliance date after 10 years (2023)
TOTAL MAXIMUM DAILY LOADS (TMDL)				
Ballona Creek Metals TMDL				
Dry Weather		January 11, 2016		
Wet Weather			January 11, 2021	
Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation (USEPA established)		March 26, 2012		
Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL				
Dry Weather	March 18, 2007			
Wet Weather			July 15, 2021	
Marina del Rey Harbor Toxic Pollutants TMDL		March 22, 2016	March 22, 2021*	
Los Angeles Harbor Bacteria TMDL	March 10, 2010			
Machado Lake Trash TMDL		March 6, 2016		
Machado Lake Nutrient TMDL			September 11, 2018	
Machado Lake Pesticides and PCBs TMDL			September 30, 2019	
Dominguez Channel and Greater LA and LB Harbor Waters Toxic Pollutants TMDL				March 23, 2032
Los Angeles River Watershed Trash TMDL		September 30, 2016		
Los Angeles River Nitrogen Compounds and Related Effects TMDL	March 23, 2004			
Los Angeles River and Tributaries Metals TMDL				
Dry Weather				January 11, 2024
Wet Weather				January 11, 2028
Los Angeles River Watershed Bacteria TMDL				
Dry Weather (Compliance dates range from 10 to 25 years)			March 23, 2022	March 23, 2037
Wet Weather				March 23, 2037
Legg Lake Trash TMDL		March 6, 2016		
Long Beach City Beaches and Los Angeles River Estuary Bacteria		March 26, 2012		

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TOTAL MAXIMUM DAILY LOADS (TMDL)	Final Compliance date has Passed	Final Compliance date within 5 years (2012-2017)	Final Compliance date between 5 and 10 years (2018-2022)	Final Compliance date after 10 years (2023)
TMDL (USEPA established)				
Los Angeles Area Lakes TMDLs (USEPA established)		March 26, 2012		
San Gabriel River and Impaired Tributaries Metals and Selenium TMDL (USEPA established)	March 26, 2007			
Los Cerritos Channel Metals TMDL (USEPA established)	March 17, 2010			
Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL			July 28, 2018	
Middle Santa Ana River Watershed Bacterial Indicator TMDLs				
Dry Weather		December 31, 2015		
Wet Weather				December 31, 2025

* If an Integrated Water Resources Approach is approved and implemented then Permittees have an extended compliance deadline.

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3. State Adopted TMDLs with Past Final Compliance Deadlines

In accordance with federal regulations, this Order includes WQBELs necessary to achieve applicable wasteload allocations assigned to MS4 discharges. In some cases, the deadline specified in the TMDL implementation plan for achieving the final wasteload allocation has passed. (See Table F-8) This Order requires that Permittees comply immediately with WQBELs and/or receiving water limitations for which final compliance deadlines have passed.

Table F-8. State-Adopted TMDLs with Past Final Implementation Deadlines

TOTAL MAXIMUM DAILY LOADS (TMDL)	Final Compliance date has Passed
Santa Clara River Nitrogen Compounds TMDL	March 23, 2004
Upper Santa Clara River Chloride TMDL	April 6, 2010
Santa Monica Bay Beaches Bacteria TMDL <i>Summer Dry Weather only</i>	July 15, 2006
Santa Monica Bay Beaches Bacteria TMDL <i>Winter Dry Weather only</i>	July 15, 2009
Malibu Creek and Lagoon Bacteria TMDL <i>Summer Dry Weather only</i>	January 24, 2009
Malibu Creek and Lagoon Bacteria TMDL <i>Winter Dry Weather only</i>	January 24, 2012
Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL <i>Dry Weather Year-round only</i>	March 18, 2007
Los Angeles Harbor Bacteria TMDL	March 10, 2010
Los Angeles River Nitrogen Compounds and Related Effects TMDL	March 23, 2004

Where a Permittee determines that its MS4 discharge may not meet the final WQBELs for the TMDLs in Table F-8 upon adoption of this Order, the Permittee may request a time schedule order (TSO) from the Regional Water Board. TSOs are issued pursuant to California Water Code section 13300, whenever a Water Board "finds that a discharge of waste is taking place or threatening to take place that violates or will violate [Regional Water Board] requirements." Permittees may individually request a TSO, or may jointly request a TSO with all Permittees subject to the WQBELs and/or receiving water limitations. Permittees must request a TSO to achieve WQBELs for the TMDLs in Table F-8 no later than 45 days after the date this Order is adopted.

In the request, the Permittee(s) must include, at a minimum, the following:

- a. Location specific data demonstrating the current quality of the MS4 discharge(s) in terms of concentration and/or load of the target pollutant(s) to the receiving waters subject to the TMDL;
- b. A detailed description and chronology of structural controls and source control efforts, including location(s) of implementation, since the effective date of the TMDL, to reduce the pollutant load in the MS4 discharges to the receiving waters subject to the TMDL;
- c. A list of discharge locations for which additional time is needed to achieve the water quality based effluent limitations and/or receiving water limitations;
- d. Justification of the need for additional time to achieve the water quality-based effluent limitations and/or receiving water limitations for each location identified in Part VI.E.3.c, above;

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- e. A detailed time schedule of specific actions the Permittee will take in order to achieve the water quality-based effluent limitations and/or receiving water limitations at each location identified in Part VI.E.3.c, above;
- f. A demonstration that the time schedule requested is as short as possible, consistent with California Water Code section 13385(j)(3)(C)(i), taking into account the technological, operation, and economic factors that affect the design, development, and implementation of the control measures that are necessary to comply with the effluent limitation(s); and
- g. If the requested time schedule exceeds one year, the proposed schedule shall include interim requirements and the date(s) for their achievement. The interim requirements shall include both of the following:
 - i. Effluent limitation(s) for the pollutant(s) of concern; and
 - ii. Actions and milestones leading to compliance with the effluent limitation(s).

The Regional Water Board does not intend to take enforcement action against a Permittee for violations of specific WQBELs and corresponding receiving water limitations for which the final compliance deadline has passed if a Permittee is fully complying with the requirements of a TSO to resolve exceedances of the WQBELs for the specific pollutant(s) in the MS4 discharge.

4. USEPA Established TMDLs

USEPA has established seven TMDLs that include wasteload allocations for MS4 discharges covered by this Order (See Table F-9). Five TMDLs were established since 2010, one in 2007, and one in 2003.

Table F-9. USEPA Established TMDLs with WLAs Assigned to MS4 Discharges

TOTAL MAXIMUM DAILY LOADS (TMDL)	Effective Date
Santa Monica Bay TMDL for DDTs and PCBs (USEPA established)	March 26, 2012
Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation (USEPA established)	March 26, 2012
Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL (USEPA established)	March 26, 2012
Los Angeles Area Lakes TMDLs (USEPA established)	March 26, 2012
Los Cerritos Channel Metals TMDL (USEPA established)	March 17, 2010
San Gabriel River and Impaired Tributaries Metals and Selenium TMDL (USEPA established)	March 26, 2007
Malibu Creek Watershed Nutrients TMDL (USEPA established)	March 21, 2003

In contrast to State-adopted TMDLs, USEPA established TMDLs do not contain an implementation plan or schedule. The Clean Water Act does not allow USEPA to either adopt implementation plans or establish compliance schedules for TMDLs that it establishes. Such decisions are generally left with the States. The Regional Water Board could either (1) adopt a separate implementation plan as a Basin Plan Amendment for each USEPA established TMDL, which would allow inclusion of compliance schedules in the permit where applicable, or (2) issue a Permittee a schedule leading to full compliance in a separate enforcement order (such as a Time

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Schedule Order or a Cease and Desist Order). To date, the Board has not adopted a separate implementation plan or enforcement order for any of these TMDLs. As such, the final WLAs in the seven USEPA established TMDLs identified above become effective immediately upon establishment by USEPA and placement in a NPDES permit.

The Regional Water Board’s decision as to how to express permit conditions for USEPA established TMDLs is based on an analysis of several specific facts and circumstances surrounding these TMDLs and their incorporation into this Order. First, since these TMDLs do not include implementation plans, none of these TMDLs have undergone a comprehensive evaluation of implementation strategies or an evaluation of the time required to fully implement control measures to achieve the final WLAs. Second, given the lack of an evaluation, the Regional Water Board is not able to adequately assess whether Permittees will be able to immediately comply with the WLAs at this time. Third, the majority of these TMDLs were established by USEPA recently (i.e., since 2010) and permittees have had limited time to plan for and implement control measures to achieve compliance with the WLAs. Lastly, while federal regulations do not allow USEPA to establish implementation plans and schedules for achieving these WLAs, USEPA has nevertheless included implementation recommendations regarding MS4 discharges as part of six of the seven of these TMDLs. The Regional Water Board needs time to adequately evaluate USEPA’s recommendations. For the reasons above, the Regional Water Board has determined that numeric water quality based effluent limitations for these USEPA established TMDLs are infeasible at the present time. The Regional Water Board may at its discretion revisit this decision within the term of the Order or in a future permit, as more information is developed to support the inclusion of numeric water quality based effluent limitations.

In lieu of inclusion of numeric water quality based effluent limitations at this time, this Order requires Permittees subject to WLAs in USEPA established TMDLs to propose and implement best management practices (BMPs) that will be effective in achieving the numeric WLAs. Permittees will propose these BMPs to the Regional Water Board in a Watershed Management Program Plan, which is subject to Regional Water Board Executive Officer approval. As part of this Plan, Permittees are also required to propose a schedule for implementing the BMPs that is as short as possible. The Regional Water Board finds that, at this time, it is reasonable to include permit conditions that require Permittees to develop specific Watershed Management Program plans that include interim milestones and schedules for actions to achieve the WLAs. These plans will facilitate a comprehensive planning process, including coordination among co-permittees where necessary, on a watershed basis to identify the most effective watershed control measures and implementation strategies to achieve the WLAs.

At a minimum, the Watershed Management Program Plan must include the following data and information relevant to the USEPA established TMDL:

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- i. Available data demonstrating the current quality of the MS4 discharge(s) in terms of concentration and/or load of the target pollutant(s) to the receiving waters subject to the TMDL;
- ii. A detailed time schedule of specific actions the Permittee will take in order to achieve the WLA(s);
- iii. A demonstration that the time schedule requested is as short as possible, taking into account the time since USEPA establishment of the TMDL, and technological, operation, and economic factors that affect the design, development, and implementation of the control measures that are necessary to comply with the WLA(s);
 - a. For the Malibu Creek Nutrient TMDL established by USEPA in 2003, in no case shall the time schedule to achieve the final numeric WLAs exceed five years from the effective date of this Order; and
- iv. If the requested time schedule exceeds one year, the proposed schedule shall include interim requirements, including numeric milestones, and the date(s) for their achievement.

Each Permittee subject to a WLA in a TMDL established by USEPA ~~since 2010~~ must submit a draft of a Watershed Management Program Plan to the Regional Water Board Executive Officer ~~for approval no later than one year after the effective date of this Order.~~

~~Each Permittee subject to a WLA in a TMDL established by USEPA prior to 2010 must submit a draft of a Watershed Management Program Plan to the Regional Water Board Executive Officer for approval no later than six months after the effective date of this Order.~~
per the timelines outlined for submittal of a Watershed Management Program or EWMP.

Based on the nature and timing of the proposed watershed control measures, the Regional Water Board will consider appropriate actions on its part, which may include: (1) no action and continued reliance on permit conditions that require implementation of the approved watershed control measures throughout the permit term; (2) adopting an implementation plan and corresponding schedule through the Basin Plan Amendment process and then incorporating water quality based effluent limitations and a compliance schedule into this Order consistent with the State-adopted implementation plan; or (3) issuing a time schedule order to provide the necessary time to fully implement the watershed control measures to achieve the WLAs.

If a Permittee chooses not to submit a Watershed Management Program Plan, or the plan is determined to be inadequate by the Regional Water Board Executive Officer and necessary revisions are not made within 90 days of written notification to the Permittee that that plan is inadequate, the Permittee will be required to demonstrate compliance with the numeric WLAs immediately based on monitoring data collected under the MRP (Attachment E) for this Order.

The Regional Water Board does not intend to take enforcement action against a Permittee for violations of specific WLAs and corresponding receiving water

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limitations for USEPA established TMDLs if a Permittee has developed and is implementing an approved Watershed Management Program to achieve the WLAs in the USEPA TMDL and the associated receiving water limitations.

E. Other Provisions

1. Legal Authority

Adequate legal authority is required to implement and enforce most parts of the Minimum Control Measures and all equivalent actions if implemented with a Watershed Management Program (See 40 CFR section 122.26(d)(2)(i)(A)-(F) and 40 CFR section 122.26(d)(2)(iv). Without adequate legal authority the MS4 would be unable to perform many vital functions such as performing inspections, requiring remedies, and requiring installation of control measures. In addition, the Permittee would not be able to penalize and/or attain remediation costs from violators.

2. Fiscal Resources

The annual fiscal analysis will show the allocated resources, expenditures, and staff resources necessary to comply with the permit, and implement and enforce the Permittee's Watershed Management Program (See 40 CFR section 122.26(d)(2)(vi). The annual analysis is necessary to show that the Permittee has adequate resources to meet all Permit Requirements. The analysis can also show year-to-year changes in funding for the storm water program. A summary of the annual analysis must be reported in the annual report. This report will help the Permitting Authority understand the resources that are dedicated to compliance with this permit, and to implementation and enforcement of the Watershed Management Program, and track how this changes over time. Furthermore, the inclusion of the requirement to perform a fiscal analysis annually is similar to requirements included in Order No. 01-182 permit as well as the current Ventura County MS4 permit.

3. Responsibilities of the Permittees

Because of the complexity and networking of the storm drain system and drainage facilities within and tributary to the LA MS4, the Regional Water Board adopted an area-wide approach in permitting storm water and urban runoff discharges. Order No. 01-182 was structured as a single permit whereby individual Permittees were assigned uniform requirements and additional requirements were assigned to the Principal Permittee (Los Angeles County Flood Control District). This permit does not designate a principal Permittee and as such requires each Permittee to implement provisions as a separate entity. Furthermore it does not hold a Permittee responsible for implementation of provisions applicable to other Permittees.

Part VI.A.4.a requires inter and intra-agency coordination to facilitate implementation of this Order. This requirement is based on 40 CFR section 122.26(d)(2)(iv) which requires "a comprehensive planning process which public participation and where necessary intergovernmental coordination, to reduce the discharge of pollutants to the maximum extent practicable [...]."

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4. Reopener and Modification Provisions

These provisions are based on 40 CFR sections 122.44, 122.62, 122.63, 122.64, 124.5, 125.62, and 125.64, and are also consistent with Order No. 01-182. The Regional Water Board may reopen the permit to modify permit conditions and requirements, as well as revoke, reissue, or terminate in accordance with federal regulations. Causes for such actions include, but are not limited to, endangerment to human health or the environment; acquisition of newly-obtained information that would have justified the application of different conditions if known at the time of Order adoption; to incorporate provisions as a result of new federal or state laws, regulations, plans, or policies (including TMDLs and other Basin Plan amendments); modification in toxicity requirements; violation of any term or condition in this Order; and/or minor modifications to correct typographical errors or require more frequent monitoring or reporting by a Permittee. The Order also includes additional causes including: within 18 months of the effective date of a revised TMDL or as soon as practicable thereafter, where the revisions warrant a change to the provisions of this Order, the Regional Water Board may modify this Order consistent with the assumptions and requirements of the revised WLA(s), including the program of implementation; in consideration of any State Water Board action regarding the precedential language of State Water Board Order WQ 99-05; and to include provisions or modifications to WQBELs in Part VI.E and Attachments L-R in this Order prior to the final compliance deadlines, if practicable, that would allow an action-based, BMP compliance demonstration approach with regard to final WQBELs for storm water discharges based on the Regional Board's evaluation of whether Watershed Management Programs in Part VI.C. of the Order have resulted in attainment of interim WQBELs for storm water and review of relevant research, including but not limited to data and information provided by Permittees and other stakeholders, on storm water quality and the efficacy and reliability of control technologies.

XIII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 308(a) of the federal Clean Water Act, and sections 122.41(h), (j)-(l), 122.44(i), and 122.48 of Title 40 of the Code of Federal Regulations requires that all NPDES permits specify monitoring and reporting requirements. Federal regulations applicable to large and medium MS4s also specify additional monitoring and reporting requirements. (40 C.F.R. §§ 122.26(d)(2)(i)(F) & (d)(2)(iii)(D), 122.42(c).) California Water Code section 13383 further authorizes the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The MRP (Attachment E of this Order) establishes monitoring, reporting, and recordkeeping requirements that implement the federal and state laws and/or regulations. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this Order.

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A. Integrated Monitoring Plans

1. Integrated Monitoring Program and Coordinated Integrated Monitoring Program

As discussed in Part VI.B of this Fact Sheet, the purpose of the Watershed Management Programs is to provide a framework for Permittees to implement the requirements of this Order in an integrated and collaborative fashion and to address water quality priorities on a watershed scale. Additionally, the Watershed Management Programs are to be designed to ensure that discharges from the Los Angeles County MS4: (i) achieve applicable water quality based effluent limitations that implement TMDLs, (ii) do not cause or contribute to exceedances of receiving water limitations, and (iii) for non-storm water discharges from the MS4, are not a source of pollutants to receiving waters. This Order allows Permittees in coordination with an approved Watershed Management Program per Part VI.C, to implement a customized monitoring program with the primary objective of allowing for the customization of the outfall monitoring programs and that achieves the five Primary Objectives set forth in Part II.A. of Attachment E and includes the elements set forth in Part II.E. of Attachment E. If pursuing a customized monitoring program, the Permittees must provide sufficient justification for each element of the program that differs from the monitoring program as set forth in Attachment E of the Order. This Order provides options for each Permittee to individually develop and implement an Integrated Monitoring Program (IMP), or alternatively, individual Permittee(s) may cooperate with other Permittees to develop a Coordinated Integrated Monitoring Program (CIMP). Both the IMP and CIMP are intended to facilitate the effective and collaborative monitoring of receiving waters, storm water, and non-storm water discharges and to report the results of monitoring to the Regional Water Board.

The key requirements for Watershed Management Programs are included in Part VI.C of this Order. The IMP and CIMP requirements within the MRP largely summarize the requirements and reinforce that, at a minimum, the IMP or CIMP must address all TMDL and Non-TMDL monitoring requirements of this Order, including receiving water monitoring, storm water outfall based monitoring, non-storm water outfall based monitoring, and regional water monitoring studies.

Both the IMP and CIMP approach provides opportunities to increase the cost efficiency and effectiveness of the Permittees monitoring program as monitoring can be designed, prioritized and implemented on a watershed basis. The IMP/CIMP approach allows the Permittees to prioritize monitoring resources between watersheds based on TMDL Implementation and Monitoring Plan schedules, coordinate outfall based monitoring programs and implement regional studies. Cost savings can also occur when Permittees coordinate their monitoring programs with other Permittees.

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B. TMDL Monitoring Plans

Monitoring requirements established in TMDL Monitoring Plans, presented in Table E-1. Approved TMDL Monitoring Plans by Watershed Management Area, were approved by the Executive Officer of the Regional Water Board prior to the effective date of this Order are incorporated into this Order by reference.

C. Receiving Water Monitoring

The purposes of receiving water monitoring are to measure the effects of storm water and non-storm water discharges from the MS4 to the receiving water, to identify water quality exceedances, to evaluate compliance with TMDL WLAs and receiving water limitations, and to evaluate whether water quality is improving, staying the same or declining.

1. Receiving Water Monitoring Stations

Receiving water monitoring is linked to outfall based monitoring in order to gauge the effects of MS4 discharges on receiving water. Receiving water monitoring stations must be downstream of ~~linked~~ outfall monitoring stations.

The IMP, CIMP or stand-alone receiving monitoring plan (in the case of jurisdictional monitoring) must include a map identifying proposed wet weather and dry-weather monitoring stations. Receiving water monitoring stations may include historical mass emission stations, TMDL compliance monitoring stations, ~~or~~ and other selected stations. The Permittee must describe how monitoring at the proposed locations will accurately characterize the effects of the discharges from the MS4 on the receiving water, and meet other stated objectives. The plan must also state whether historical mass emission stations will continue to be monitored, and if not, provide sufficient justification for discontinuation of monitoring at the historical mass emissions stations, and describe the value of past receiving water monitoring data in performing trends analysis to assess whether water quality is improving, staying the same or declining.

2. Minimum Monitoring Requirements

Receiving water is to be monitored during both dry and wet weather conditions to assess the impact of non-storm water and storm water discharges. Wet weather and dry weather are defined in each watershed, consistent with the definitions in TMDLs approved within the watershed. Monitoring is to commence ~~within 6 hours of the commencement of~~ as soon as possible after linked outfall monitoring in order to be reflective of potential impacts from MS4 discharges. At a minimum, the parameters to be monitored and the monitoring frequency are the same as those required for the linked outfalls.

D. Outfall Based Monitoring

The MRP requires Permittees to conduct outfall monitoring, linked with receiving water monitoring, bioassessment monitoring and TMDL special studies. The MRP allows the

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Permittees flexibility to integrate the minimum requirements of this Order, applicable TMDL monitoring plans and other regional monitoring obligations into a single IMP or within a CIMP.

Per Part VII.A of the MRP, the Permittee must establish a ~~storm drain system~~ map or geographic database of storm drains, channels and outfalls to aid in the development of the outfall monitoring plan and to assist the Regional Water Board in reviewing the logic and adequacy of the number and location of outfalls selected for monitoring. The map/database must include the storm drain network, receiving waters, other surface waters that may impact hydrology, including dams and dry weather diversions. In addition, the map must identify the location and identifying code for each major outfall within the Permittee's jurisdiction. The map must include overlays including jurisdictional boundaries, subwatershed boundaries and storm drain outfall catchment boundaries. The map must distinguish between storm drain catchment drainage areas and subwatershed drainage areas, as these may differ. In addition, the map must include overlays displaying land use, impervious area and effective impervious area (if available). To the extent known, outfalls that convey significant non-stormwater discharges (see Part I.F to this Fact Sheet), must also be identified on the map, and the map must be updated annually to include the total list of known outfalls conveying significant flow of non-storm water discharge.

E. Storm Water Outfall Based Monitoring

The purpose of the outfall monitoring plan is to characterize the storm water discharges from each Permittee's drainages within each subwatershed. Outfall based monitoring is also conducted to assess compliance with WQBELs. ~~Under an IMP approach~~ Unless Permittees have proposed and received approval for a customized monitoring program as previously discussed, each Permittee must identify at least one outfall within each subwatershed (HUC 12) within its jurisdictional boundary to monitor storm water discharges. The selected outfall(s) should receive drainage from an area representative of the land uses within the portion of its jurisdiction that drains to the subwatershed, and not be unduly influenced by storm water discharges from upstream jurisdictions or other NPDES discharges. It is assumed that storm water runoff quality will be similar for similar land use areas, and therefore runoff from a representative area will provide sufficient characterization of the entire drainage area. Factors that may impact storm water runoff quality include the land use (industrial, residential, commercial) and the control measures that are applied. Factors that may impact storm water runoff volume include percent effective impervious cover (connected to the storm drain system), vegetation type, soil compaction and soil permeability.

Storm water outfall monitoring is linked to receiving water monitoring (see above). Monitoring must be conducted at least three times per year during qualifying rain events, including the first rain event of the year and conducted approximately concurrently (within 6 hours) before the commencement of the downstream receiving water monitoring.

Monitoring is conducted for pollutants of concern including all pollutants with assigned WQBELs. Parameters to be monitored during wet weather include: flow, pollutants

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subject to a TMDL applicable to the receiving water, pollutants listed on the Clean Water Act Section 303(d) list for the receiving water or a downstream receiving water. Flow is necessary to calculate pollutant loading. Sampling requirements, including methods for collecting flow-weighted composite samples, are consistent with the Ventura County Monitoring program (Order No. C17388).

For water bodies listed on the Clean Water Act section 303(d) list as being impaired due to sedimentation, siltation or turbidity, total suspended solids (TSS) and suspended sediment concentration (SSC) must be analyzed. TSS is the parameter most often required in NPDES permits to measure suspended solids. However, studies conducted by the United States Geological Survey (USGS) have found that the TSS procedure may not capture the full range of sediment particle sizes contributing to sediment impairments . Therefore both TSS and SSC are required in this Order.

For freshwater, the following field measurements are also required: hardness, pH, dissolved oxygen, temperature, and specific conductivity. Hardness, pH and temperature are parameters impacting the effect of pollutants in freshwater (i.e., metals water quality standards are dependent on hardness, ammonia toxicity is dependent on pH and temperature. Temperature and dissolved oxygen are interdependent and fundamental to supporting aquatic life beneficial uses. Specific conductivity is a parameter important to assessing potential threats to MUN and freshwater aquatic life beneficial uses.

Aquatic toxicity monitoring is required in the receiving water twice per year during wet weather conditions. Aquatic toxicity is a direct measure of toxicity and integrates the effects of multiple synergistic effects of known and unidentified pollutants. When samples are found to be toxic, a Toxicity Identification Evaluation must be performed in an attempt to identify the pollutants causing toxicity. Aquatic toxicity is required to be monitored in the receiving water twice per year during wet-weather rather than three times per year due to the expense of the procedure.

The monitoring data is to be accompanied by rainfall data and hydrographs, and a narrative description of the storm event, consistent with the requirements in the Ventura County MS4 (Monitoring Program—No. CI 7388). This information will allow the Permittee and the Regional Water Board staff to evaluate the effects of differing storm events in terms of storm water runoff volume and duration and in-stream effects.

F. Non-Stormwater Outfall-Based Screening and Monitoring Program

The non-storm water outfall screening and monitoring program is intended to build off of Permittees prior efforts under Order No. 01-182 to screen all outfalls within their MS4 to identify illicit connections and discharges. Under this Order, the Permittees will use the following step-wise method to assess non-storm water discharges.

- Develop criteria or other means to ensure that all outfalls with significant non-storm water discharges are identified and assessed during the term of this Order.

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- For outfalls determined to have significant non-storm water flow, determine whether flows are the result of illicit connections/illicit discharges (IC/IDs), authorized or conditionally exempt non-storm water flows, or from unknown sources.
- Refer information related to identified IC/IDs to the IC/ID Elimination Program (Part VI.D.9-10 of this Order) for appropriate action.
- Based on existing screening or monitoring data or other institutional knowledge, assess the impact of non-storm water discharges (other than identified IC/IDs) on the receiving water.
- Prioritize monitoring of outfalls considering the potential threat to the receiving water and applicable TMDL compliance schedules.
- Conduct monitoring or assess existing monitoring data to determine the impact of non-storm water discharges on the receiving water.
- Conduct monitoring or other investigations to identify the source of pollutants in non-storm water discharges.
- Use results of the screening process to evaluate the conditionally exempt non-storm water discharges identified in Part III.A.2 and III.A.3 in this Order and take appropriate actions pursuant to Part III.A.4.d of this Order for those discharges that have been found to be a source of pollutants. Any future reclassification shall occur per the conditions in Parts III.A.2 or III.A.6 of this Order.

The screening and monitoring program is intended to maximize the use of Permittee resources by integrating the screening and monitoring process into existing or planned IMP/CIMP efforts. It is also intended to rely on the illicit discharge source investigation and elimination requirements in Part VI.D.9-10 of this Order and the MS4 Mapping requirements in Part VII.A of the MRP.

The screening and source identification component of the program is used to identify the source(s) and point(s) of origin of the non-storm water discharge. The Permittee is required to develop a source identification schedule based on the prioritized list of outfalls exhibiting significant non-storm water discharges. The schedule shall ensure that source investigations are to be conducted for no less than 25% of the outfalls in the inventory within three years of the effective date of this Order and 100% of the outfalls within 5 years of the effective date of this Order. This will ensure that all outfalls with significant non-storm water discharges will be assessed within the term of this Order.

Additional requirements have been included to require the Permittee to develop a map and database of all outfalls with known non-storm water discharges. The database and map are to be updated throughout the term of this Order. If the source of the non-storm water discharge is determined to be an NPDES permitted discharge, a discharge subject to a Record of Decision approved by USEPA pursuant to section 121 of CERCLA, a conditionally exempt essential non-storm water discharge, or entirely comprised of natural flows as defined at Part III.A.d of this Order, the Permittee need only document the source and report to the Regional Water Board within 30 days of determination and in the next annual report. Likewise, if the discharge is determined to

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originate in an upstream jurisdiction, the Permittee is to provide notice and all characterization data to the upstream jurisdiction within 30 days of determination.

However, if the source is either unknown or a conditionally exempt non-essential non-storm water discharge, each Permittee shall conduct monitoring required in Part IX.F of the MRP. Special provisions are also provided if the discharge is found to result from multiple sources.

The parameters to be monitored include flow rate, pollutants assigned a WQBEL or receiving water limitation to implement TMDL provisions for the respective receiving water, as identified in Attachments L - R of this Order, non-storm water action levels as identified in Attachment G of this Order, and CWA Section 303(d) listed pollutants for the respective receiving water. Aquatic Toxicity required only when receiving water monitoring indicates aquatic toxicity and the TIE conducted in the receiving water is inconclusive.

In an effort to provide flexibility and allow the Permittee to prioritize its monitoring efforts, the outfall based monitoring can be integrated within an IMP/CIMP. For outfalls subject to a dry weather TMDL, monitoring frequency is established per the approved TMDL Monitoring Program.

Unless specified in an approved IMP/CIMP, outfalls not subject to dry weather TMDLs must be monitored at least four times during the first year of monitoring. ~~Due to the expense, Aquatic Toxicity monitoring is only required twice per year.~~ The four times per year monitoring is reflective of the potential for high variability in the quality and volume of non-storm water discharges and duration as opposed to storm water discharges.

Collected monitoring data is to be compared against applicable receiving water limitations, water quality based effluent limitations, non-storm water action levels, or exhibited Aquatic Toxicity as defined in the Parts XII.F and G of the MRP and all exceedances are to be reported in the Integrated Monitoring Compliance Report required in Part XIX.A.5 of the MRP.

After the first year, monitoring for specific pollutants may be reduced to once per year, if the values reported in the first year do not exceed applicable non-storm water WQBELs, non-storm water action levels, or a water quality standard applicable to the receiving water.

After ~~two years~~one year of monitoring, the Permittee may submit a written request to the Executive Officer of the Regional Water Board requesting to eliminate monitoring for specific pollutants based on an analysis demonstrating that there is no reasonable potential for the pollutant to exist in the discharge at a concentration exceeding applicable water quality standards.

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1. Dry Weather Screening Monitoring

a. Background

Clean Water Act section 402(p) regulates discharges from municipal separate storm sewer systems (MS4s). Clean Water Act section 402(p)(3)(B)(ii) requires the Permittees to effectively prohibit non-storm water from entering the MS4.

Non-exempted, non-storm water discharges are to be effectively prohibited from entering the MS4 or become subject to another NPDES permit (55 Fed.Reg. 47990, 47995 (Nov.16, 1990)). Conveyances which continue to accept non-exempt, non-storm water discharges do not meet the definition of MS4 and are not subject to Clean Water Act section 402(p)(3)(B) unless the discharges are issued separate NPDES permits. Instead, conveyances that continue to accept non-exempt, non-storm water discharges that do not have a separate NPDES permit are subject to sections 301 and 402 of the CWA (55 Fed.Reg. 47990, 48037 (Nov. 16, 1990)).

In part, to implement these statutory provisions, Order No. 01-182 included non-storm water discharge prohibitions. Several categories of non-storm water discharges are specifically identified as authorized or conditionally exempt non-storm water discharges, including:

- i. Discharges covered under an NPDES permit
- ii. Discharges authorized by USEPA under CERCLA
- iii. Discharges resulting from natural flows
- iv. Discharges from emergency fire fighting activity
- v. Some Categories of Discharges incidental to urban activities

Further, as another mechanism to effectively prohibit non-storm water discharges into the MS4, Order No. 01-182 also requires the Los Angeles County MS4 Co-Permittees to implement an illicit connections and illicit discharges elimination program as part of their storm water management program pursuant to 40 CFR section 122.26(d)(2)(iv)(B).

Finally, Monitoring and Reporting Program CI 6948, a part of Order No. 01-182, required dry weather monitoring at the Mass Emissions Stations (MES) to estimate pollutant contributions and determine if the MS4 is contributing to exceedances of applicable water quality standards during dry weather.

b. Evaluation of Dry Weather Data

40 CFR section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard. The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as

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specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in the Basin Plan and other state plans and policies, or any applicable water quality criteria contained in the California Toxics Rule (CTR) and National Toxics Rule (NTR).

In an effort to evaluate the Discharger's program to effectively prohibit non-storm water discharges into the MS4, as well as to determine whether MS4 discharges are potentially contributing to exceedances of water quality standards, the Reasonable Potential Analysis (RPA) process was used as a screening tool. In doing so, dry weather monitoring data submitted by the Discharger was evaluated to identify where non-storm water discharges may impact beneficial uses and where additional monitoring and/or investigations of non-storm water discharges should be focused.

Order No. 01-182 and Monitoring and Reporting Program No. 6948 required the Discharger to implement core monitoring at seven mass emission stations:

- Ballona Creek
- Malibu Creek
- Los Angeles River
- San Gabriel River (representing the upper portion of the San Gabriel River Watershed Management Area)
- Coyote Creek (representing the lower portion of the San Gabriel River Watershed Management Area)
- Dominguez Channel
- Santa Clara River

In addition to wet weather monitoring requirements at each of the mass emission stations, a minimum of two dry weather samples were required each year. Monitoring was required for conventional pollutants (BOD, TSS, pH, fecal coliform, oil and grease), priority pollutants, and a variety of other nonconventional pollutants (e.g., nutrients, dissolved oxygen, salinity/conductivity).

Dry weather monitoring data were compiled from Annual Stormwater Monitoring Reports submitted by the Los Angeles County Department of Public Works for the period from 2005 to 2011 to reflect the most recent data. The Annual Stormwater Monitoring Reports include the results for dry weather samples that were collected from 2005 to 2011 on 15 different dates.

For each monitored parameter, the most stringent applicable water quality objective/criterion was identified from the Basin Plan and the CTR at 40 CFR section 131.38. The following assumptions were made when conducting the analysis:

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- The mass emissions stations represented only freshwater segments. Accordingly, CTR criteria for the protection of freshwater aquatic life were selected for comparison to monitoring results.
- For hardness-dependent metals, criteria were derived by using the lowest reported dry-weather hardness value for each mass emission station for the period of 2005 to 2011.
- For screening purposes the criteria associated with the most protective beneficial use for any segment within the watershed was selected for comparison to monitoring results.
- Basin Plan surface water quality objectives for minerals (i.e., total dissolved solids, sulfate, and chloride) apply to specific stream reaches within each watershed and are provided in Chapter 3 of the Basin Plan. Where no specific objectives are identified, footnote f to Table 3-8 provides guidelines for protection of various beneficial uses. When guidelines were presented as a range, the most protective (low end of range) value was selected and applied according to beneficial uses in the watershed.
- With the exception of bacteria, the water quality objectives used for the analysis are the most current in effect. Since adoption of Order No. 01-182 in 2001, some Basin Plan objectives and CTR criteria have been amended. As a result, the pollutants monitored under the MRP for Order No. 01-182 may not necessarily reflect current objectives.
- *E coli* bacteria was not required as part of the MRP to Order No. 01-182, thus screening for bacteria was based solely on fecal coliform. Monitoring results for fecal coliform were compared to the Basin Plan fecal coliform objective in effect during the monitoring period. The Basin Plan objective for bacteria was amended in December 2011 to omit fecal coliform as a fresh water objective. The existing numeric bacteria objective for freshwater is limited to *E. coli*. The Basin Plan bacteria objectives are expressed as a single sample maximum and a geometric mean. In this screening, limited data precluded calculation of geometric means, therefore, the geometric mean objective was treated as a “not-to-exceed” criterion for screening purposes. The geometric mean objective for fecal coliform is 200/100 ml (the Basin Plan objective to protect primary contact recreation beneficial use (REC-1) uses in freshwaters).
- Within a given watershed, where the Basin Plan designates a “Potential” beneficial use of MUN, drinking water maximum contaminant levels (MCLs) were not applied as the most stringent objectives. Within a given watershed, where the Basin Plan designates “Potential” or “Intermittent” for beneficial uses other than MUN, the appropriate protective objectives were used for screening. This is consistent with Basin Plan requirements and existing permitting procedures.

The maximum reported pollutant concentration was compared to the most stringent applicable water quality objective to determine if there was potential for receiving water concentrations to exceed water quality objectives.

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Table F-10 summarizes the results of the RPA analysis based on evaluation of the 15 sets of data for the period of 2005 to 2011 for each of the mass emission stations. Generally, all priority pollutant organic parameters were reported as below detection levels at practical quantitation levels (PQLs) consistent with the minimum levels (MLs) listed in the SIP. The most prevalent pollutants of concern among the mass emission stations include fecal coliform bacteria, cyanide, mercury, chloride, sulfate, total dissolved solids, copper, and selenium. Reported fecal coliform bacteria, cyanide, copper, and selenium concentrations appear to consistently exceed objectives/criteria in all watersheds at relatively high levels. For watersheds where objectives apply for sulfate and total dissolved solids, the receiving water concentrations consistently exceeded the objectives. The incidences where exceedances are indicated for mercury are largely due to analytical detection levels that were higher than the applicable criterion.

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Table F-10. Summary of LA County Watersheds and Frequency of Receiving Water Exceeding Criteria - 2005 to 2011- Dry Season Data Analysis¹

Parameter	Santa Clara River	Los Angeles River	Dominguez Channel	Ballona Creek	Malibu Creek	San Gabriel River	
						Upper Portion	Lower Portion
pH	0/15	7/15	5/15	3/15	0/15	1/14	2/15
Total Coliform	No FW Objective	No FW Objective)	No FW Objective	No FW Objective	No FW Objective	No FW Objective	No FW Objective
Fecal Coliform	4/15	4/15	10/15	13/15	6/15	11/14	13/15
Enterococcus	No FW Objective	No FW Objective	No FW Objective	No FW Objective	No FW Objective	No FW Objective	No FW Objective
Chloride	15/15	15/15	No Objective	0/15	0/15	14/14	15/15
Dissolved Oxygen	1/15	0/15	0/15	0/15	0/15	√1/14	0/15
Nitrate-N	0/15	0/15	No Objective	No Objective	0/15	7/14	No Objective
Nitrite-N	0/15	3/15	No Objective	No Objective	0/15	0/15	No Objective
Methylene Blue Active Substances	4/15	0/15	No Objective	No Objective	0/15	0/14	No Objective
Sulfate	15/15	15/15	No Objective	No Objective	15/15	14/14	15/15
Total Dissolved Solids	15/15	15/15	No Objective	No Objective	13/15	14/14	15/15
Turbidity ²	0/15	2/15	No Objective	No Objective	0/15	0/15	0/15
Cyanide	11/15	14/15	4/15	15/15	3/15	14/14	15/15
Total Aluminum	1/15	2/15	No Objective	No Objective	0/15	1/14	No Objective
Dissolved Copper	0/15	0/15	5/15	0/15	0/15	13/14	0/15
Total Copper	1/15	6/15	11/15	3/15	0/15	13/14	2/15
Dissolved Lead	0/15	0/15	0/15	0/15	0/15	1/14	0/15
Total Lead	0/15	0/15	1/15	1/15	0/15	13/14	0/15
Total Mercury	15/15	14/15	14/15	15/15	15/15	14/14	15/15
Dissolved Mercury	15/15	15/15	15/15	15/15	15/15	14/14	14/14
Total Nickel	0/15	0/15	0/15	0/15	0/15	1/14	0/15
Dissolved Selenium	2/15	2/15	1/15	2/15	6/15	1/15	10/11
Total Selenium	2/15	2/15	1/15	2/15	6/15	1/15	10/11
Dissolved Zinc	0/15	0/15	0/15	0/15	0/15	7/10	0/15
Total Zinc	0/15	0/15	0/15	0/15	0/15	10/10	0/15

¹ Frequency of exceedance is denoted as number of exceedances/number of dry weather samples evaluated. For example, "2/15" indicates 2 of the 15 samples had analytical results that exceeded the water quality objective for a given parameter.

2. The Basin Plan objective for turbidity for the protection of MUN is the secondary MCL of 5 NTU. The Basin Plan contains additional turbidity objectives expressed as incremental changes over natural conditions. Since inadequate data were available to assess criteria expressed as incremental changes, only the MCL was considered in the analysis.

c. Requirements for Controlling Non-Storm Water Discharges

The USEPA’s approach for non-storm water discharges from MS4s is to regulate these discharges under the existing CWA section 402 NPDES framework for discharges to surface waters. The NPDES program (40 CFR section 122.44(d)) utilizes discharge prohibitions and effluent limitations as regulatory mechanisms to regulate non-storm water discharges, including the use of technology- and water quality-based effluent limitations. Non-numerical controls, such as BMPs for non-storm water discharges may only be authorized where numerical effluent limitations are infeasible.

As described in Table F-10 above, there were a number of pollutants for which it was determined that receiving water concentrations at the mass emission stations indicate possible exceedances of water quality standards within the watershed. However, for waterbody-pollutant combinations not subject to a TMDL, there is uncertainty regarding whether exceedances occurred within specific segments where standards apply; the extent to which non-storm water discharges from the MS4 have caused or contributed to any exceedances; and whether the exceedances are attributable to any one or more specific MS4 outfalls within the watershed management area.

Given the need for additional data on non-stormwater discharges from the MS4 where a TMDL has not been developed, USEPA and the State have used action levels as a means to gauge potential impact to water quality and to identify the potential need for additional controls for non-stormwater discharges in the future. If these action levels are exceeded, then additional requirements (e.g., numeric effluent limitations, increased monitoring, special studies, additional BMPs) are typically used to address the potential impacts. In this case, non-storm water action levels are applicable to non-storm water discharges from that MS4 outfall. Non-storm water discharges from the MS4 are those which occur during dry weather conditions. These action levels are not applied to storm water discharges, as defined within this Order. Storm water discharges regulated by this Order are required to meet the MEP standard and other provisions determined necessary by the State to control pollutants and have separate requirements under this Order.

The use of action levels in this Order does not restrict the Regional Water Boards ability to modify this Order in accordance with 40 CFR section 122.62 to include numeric effluent limitations should monitoring data indicate that controls beyond action levels are necessary to ensure that non-storm water discharges do not cause or contribute to exceedances of water quality standards.

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i. Approach for Deriving Action Levels

Where exceedances are indicated in Table F-10 and where a TMDL has not been developed, action levels are applied as a screening tool to indicate where non-storm water discharges, including exempted flows and illicit connections may be causing or contributing to exceedances of water quality objectives. Action levels in this Order are based upon numeric or narrative water quality objectives and criteria as defined in the Basin Plan, the Water Quality Control Plan for Ocean Waters of California (Ocean Plan), and the CTR.

(1) Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries*Priority Pollutants Subject to the CTR*

Priority pollutant water quality criteria in the CTR are applicable to all inland surface waters, enclosed bays, and estuaries. The CTR contains both saltwater and freshwater criteria. Because a distinct separation generally does not exist between freshwater and saltwater aquatic communities, the following apply, in accordance with Section 131.38(c)(3):

- For waters in which the salinity is equal to or less than 1 part per thousand (ppt), the freshwater criteria apply.
- For waters in which the salinity is greater than 10 ppt 95 percent or more of the time, the saltwater criteria apply.
- For waters in which the salinity is between 1 ppt and 10 ppt, the more stringent of the freshwater or saltwater criteria apply.

For continuous discharges, 40 CFR section 122.45(d)(1) specifies daily maximum and average monthly effluent limitations. Because of the uncertainty regarding the frequency of occurrence and duration of non-storm water discharges through the MS4, average monthly action levels (AMALs) and maximum daily action levels (MDALs) were calculated following the procedure based on the steady-state model, available in Section 1.4 of the SIP. The SIP procedures were used to calculate action levels for CTR priority pollutants and other constituents for which the Basin Plan contains numeric objectives.

Since many of the streams in the Region have minimal upstream flows, mixing zones and dilution credits are usually not appropriate. Therefore, in this Order, no dilution credit is being allowed.

40 CFR section 122.45(c) requires that effluent limitations for metals be expressed as total recoverable concentration; therefore it is appropriate to include action levels also as a total recoverable concentration. The SIP requires that if it is necessary to express a dissolved metal value as a total recoverable and a site-specific translator has not yet been developed, the

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Regional Water Board shall use the applicable conversion factor contained in the 40 CFR section 131.38.

Using nickel as an example, and assuming application of saltwater criteria (e.g., a situation where an MS4 outfall discharges to an estuary), the following demonstrates how action levels were established for this Order. The tables in Attachment H provide the action levels for each watershed management area addressed by this Order using the process described below.

The process for developing these limits is in accordance with Section 1.4 of the SIP. Two sets of AMAL and MDAL values are calculated separately, one set for the protection of aquatic life and the other for the protection of human health (consumption of organisms only). The AMALs and MDALs for aquatic life and human health are compared, and the most restrictive AMAL and the most restrictive MDAL are selected as the action level.

Step 1: For each constituent requiring an action level, identify the applicable water quality criteria or objective. For each criterion, determine the effluent concentration allowance (ECA) using the following steady state mass balance equation:

$$\begin{aligned} \text{ECA} &= C + D(C-B) \quad \text{when } C > B, \text{ and} \\ \text{ECA} &= C \quad \text{when } C \leq B, \end{aligned}$$

Where:

- C = The priority pollutant criterion/objective, adjusted if necessary for hardness, pH and translators (criteria for saltwater are independent of hardness and pH).
- D = The dilution credit, and
- B = The ambient background concentration

As discussed above, for this Order, dilution was not allowed; therefore:

$$\text{ECA} = C$$

For nickel the applicable ECAs are:

$$\text{ECA}_{\text{acute}} = 75 \mu\text{g/L}$$

$$\text{ECA}_{\text{chronic}} = 8.3 \mu\text{g/L}$$

Step 2: For each ECA based on aquatic life criterion/objective, determine the long-term average discharge condition (LTA) by multiplying the ECA by a factor (multiplier). The multiplier is a statistically based factor that adjusts the ECA to account for effluent variability. The value of the

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multiplier varies depending on the coefficient of variation (CV) of the data set and whether it is an acute or chronic criterion/objective. Table 1 of the SIP provides pre-calculated values for the multipliers based on the value of the CV. Equations to develop the multipliers in place of using values in the tables are provided in Section 1.4, Step 3 of the SIP and will not be repeated here.

$$LTA_{acute} = ECA_{acute} \times Multiplier_{acute} \text{ 99}$$

$$LTA_{chronic} = ECA_{chronic} \times Multiplier_{chronic} \text{ 99}$$

The CV for the data set must be determined before the multipliers can be selected and will vary depending on the number of samples and the standard deviation of a data set. If the data set is less than 10 samples, or at least 80% of the samples in the data set are reported as non-detect, the CV shall be set equal to 0.6. For nickel, a CV of 0.6 was assumed.

For nickel, the following data were used to develop the acute and chronic LTA using equations provided in Section 1.4, Step 3 of the SIP (Table 1 of the SIP also provides this data up to three decimals):

CV	ECA Multiplier _{acute}	ECA Multiplier _{chronic}
0.6	0.32	0.53

$$LTA_{acute} = 75 \mu\text{g/L} \times 0.32 = 24 \mu\text{g/L}$$

$$LTA_{chronic} = 8.3 \mu\text{g/L} \times 0.53 = 4.4 \mu\text{g/L}$$

Step 3: Select the most limiting (lowest) of the LTA.

LTA = most limiting of LTA_{acute} or LTA_{chronic}

For nickel, the most limiting LTA was the LTA_{chronic}

$$LTA_{nickel} = LTA_{chronic} = 4.4 \mu\text{g/L}$$

Step 4: Calculate the action levels by multiplying the LTA by a factor (multiplier). Action levels are expressed as AMAL and MDAL. The multiplier is a statistically based factor that adjusts the LTA for the averaging periods and exceedance frequencies of the criteria/objectives and the action levels. The value of the multiplier varies depending on the probability basis, the CV of the data set, the number of samples (for AMAL) and whether it is a monthly or daily limit. Table 2 of the SIP provides pre-calculated values for the multipliers based on the value of the CV and the number of samples. Equations to develop the multipliers in place of using values in the tables are provided in Section 1.4, Step 5 of the SIP and will not be repeated here.

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$$AMAL_{\text{aquatic life}} = LTA \times AMAL_{\text{multiplier 95}}$$

$$MDAL_{\text{aquatic life}} = LTA \times MDAL_{\text{multiplier 99}}$$

AMAL multipliers are based on a 95th percentile occurrence probability, and the MDAL multipliers are based on the 99th percentile occurrence probability. If the number of samples is less than four (4), the default number of samples to be used is four (4).

For nickel, the following data were used to develop the AMAL and MDAL for action levels using equations provided in Section 1.4, Step 5 of the SIP (Table 2 of the SIP also provides this data up to two decimals):

No. of Samples Per Month	CV	Multiplier _{MDAL 99}	Multiplier _{AMAL 95}
4	0.6	3.11	1.55

Therefore:

$$AMAL = 4.4 \mu\text{g/L} \times 1.55 = 6.8 \mu\text{g/L}$$

$$MDAL = 4.4 \mu\text{g/L} \times 3.11 = 14 \mu\text{g/L}$$

Step 5: For the ECA based on human health, set the AMAL equal to the ECA_{human health}

$$AMAL_{\text{human health}} = ECA_{\text{human health}}$$

For nickel:

$$AMAL_{\text{human health}} = 4,600 \mu\text{g/L}$$

Step 6: Calculate the MDAL for human health by multiplying the AMAL by the ratio of the Multiplier_{MDAL} to the Multiplier_{AMAL}. Table 2 of the SIP provides pre-calculated ratios to be used in this calculation based on the CV and the number of samples.

$$MDAL_{\text{human health}} = AMAL_{\text{human health}} \times (\text{Multiplier}_{MDAL} / \text{Multiplier}_{AMAL})$$

For nickel, the following data were used to develop the MDAL_{human health}:

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No. of Samples Per Month	CV	Multiplier _{MDAL 99}	Multiplier _{AMAL 95}	Ratio
4	0.6	3.11	1.55	2.0

For nickel:

$$MDAL_{\text{human health}} = 4,600 \mu\text{g/L} \times 2 = 9,200 \mu\text{g/L}$$

Step 7: Select the lower of the AMAL and MDAL based on aquatic life and human health as the non-storm water action level for this Order.

AMAL _{aquatic life}	MDAL _{aquatic life}	AMAL _{human health}	MDAL _{human health}
6.8	14	4,600	9,200

For nickel, the lowest (most restrictive) levels are based on aquatic toxicity and serve as the basis for non-storm water action levels included in this Order.

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Table F-11: Calculations of Freshwater Action Levels¹

Parameter	Units	CV	Aquatic Life Criteria ²		Human Health Criteria	HH Calculations			Aquatic Life Calculations									Final Effluent Limitations Action Levels	
			C acute = CMC tot	C chronic = CCC tot		HH-Organisms only	ECA _{HH} = AMAL _{HH}	AMAL/MDAL Multiplier _{HH}	MDAL _{HH}	ECA Multiplier _{acute}	LTA _{acute}	ECA Multiplier _{chronic}	LTA _{chronic}	Lowest LTA	AMAL Multiplier ₉₅	AMAL _{AL}	MDAL Multiplier ₉₉	MDAL _{AL}	Lowest AMAL
Cadmium	µg/L	0.6	4.52	2.46	N		2.01		0.321	1.45	0.527	1.30	1.30	1.55	2.02	3.11	4.0	2.0	4.0
Copper	µg/L	0.6	14.00	9.33			2.01		0.321	4.49	0.527	4.92	4.49	1.55	6.98	3.11	14	7.0	14
Lead	µg/L	0.6	81.65	3.18	N		2.01		0.321	26.21	0.527	1.68	1.68	1.55	2.61	3.11	5.2	2.6	5.2
Mercury	µg/L	0.6	R	R	0.051	0.051	2.01	0.1023										0.051	0.10
Nickel	µg/L	0.6	469.17	52.16	4600	4600	2.01	9228	0.321	150.6	0.527	27.51	27.51	1.55	42.71	3.11	86	43	86
Selenium	µg/L	0.6	20.00	5.00	N		2.01		0.321	6.42	0.527	2.64	2.64	1.55	4.09	3.11	8.2	4.1	8.2
Silver	µg/L	0.6	4.06				2.01		0.321	1.30	0.527		1.30	1.55	2.02	3.11	4.1	2.0	4.1
Zinc	µg/L	0.6	119.82	119.82			2.01		0.321	38.47	0.527	63.20	38.47	1.55	59.72	3.11	120	60	120
Cyanide	µg/L	0.6	22.00	5.20	22,0000	22,0000	2.01	44,1362	0.321	7.06	0.527	2.74	2.74	1.55	4.26	3.11	8.5	4.3	8.5

R = Reserved

N = Narrative

¹ Calculations include rounded results. Final AMALs/MDALs are rounded to 2 significant digits.

² Where criteria are based on hardness, a value of 100 mg/L CaCO3 was used for these sample calculations.

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Table F-12: Calculations of Saltwater Action Levels

Parameter	Units	CV	Aquatic Life Criteria		Human Health Criteria	HH Calculations			Aquatic Life Calculations									Final Effluent Limitations Action Levels	
			C acute = CMC tot	C chronic = CCC tot	HH-Organisms only	ECA _{HH} = AMAL _{HH}	AMAL/MDAL Multiplier _{HH}	MDAL _{HH}	ECA Multiplier _{acute}	LTA _{acute}	ECA Multiplier _{chronic}	LTA _{chronic}	Lowest LTA	AMAL Multiplier ₉₅	AMAL _{AL}	MDAL Multiplier ₉₉	MDAL _{AL}	Lowest AMAL	Lowest MDAL
Cadmium	µg/L	0.6	42.25	9.36	N		2.01		0.321	13.57	0.527	4.93	4.93	1.55	7.66	3.11	15.4	7.7	15.4
Copper	µg/L	0.6	5.78	3.73			2.01		0.321	1.86	0.527	1.97	1.86	1.55	2.88	3.11	5.8	2.9	5.8
Lead	µg/L	0.6	220.82	8.52	N		2.01		0.321	70.90	0.527	4.49	4.49	1.55	6.97	3.11	14	7.0	14
Mercury	µg/L	0.6	R	R	0.051	0.051	2.01	0.1023										0.051	0.10
Nickel	µg/L	0.6	74.75	8.28	4600	4600	2.01	9228	0.321	24.00	0.527	4.37	4.37	1.55	6.78	3.11	14	6.8	14
Selenium	µg/L	0.6	290.58	71.14	N		2.01		0.321	93.30	0.527	37.52	37.52	1.55	58.25	3.11	117	58	117
Silver	µg/L	0.6	2.24				2.01		0.321	0.72	0.527		0.72	1.55	1.11	3.11	2.2	1.1	2.2
Zinc	µg/L	0.6	95.14	85.62			2.01		0.321	30.55	0.527	45.16	30.55	1.55	47.42	3.11	95	47	95
Cyanide	µg/L	0.6	1.00	1.00	22,0000	22,0000	2.01	44,1362	0.321	0.32	0.527	0.53	0.32	1.55	0.50	3.11	1.0	0.50	1.0

R = Reserved

N = Narrative

¹ Calculations include rounded results. Final AMALs/MDALs are rounded to 2 significant digits.

REVISIONS

Basin Plan Requirements for Other Pollutants

A number of pollutants were identified that exceed applicable Basin Plan objectives. These objectives however, are not amenable to the SIP process for developing action levels.

Resolution No. 01-018, Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Bacteria Objectives for Water Bodies Designated for Water Contact Recreation, adopted by the Regional Water Board on October 25, 2001, served as the basis for the action levels for bacteria. Subsequently, the Basin Plan was amended through Order No. R10-005 (effective on December 5, 2011) to remove the freshwater fecal coliform numeric objective while retaining the freshwater objective for *E. coli*. The dry-weather evaluation conducted for fecal coliform indicates of a need for a bacteria action level. Since the Basin Plan no longer contains freshwater objectives for fecal coliform, action levels have been developed for *E. coli* in freshwater. The current bacteria objectives (saltwater and freshwater) are applied directly to the MS4 outfalls discharging to freshwaters to serve as action levels.

The Basin Plan, in Tables 3-5 through 3-7, include chemical constituents objectives based on the incorporation of Title 22, Drinking Water Standards, by reference, to protect the surface water MUN beneficial use. The Basin Plan in Tables 3-8 and 3-10 also includes mineral quality objectives that apply to specific watersheds and stream reaches and where indicated by the beneficial use of ground water recharge (GWR). These objectives contained in the Basin Plan are listed as not-to-exceed values. Consistent with the approach used by the Regional Water Board in other Orders for dry weather discharges, these not-to-exceed values will be applied as AMALs in this Order.

(2) Discharges to the Surf Zone

From the Table B water quality objectives of the Ocean Plan, action levels are calculated according to Equation 1 of the Ocean Plan for all pollutants:

$$C_e = C_o + D_m(C_o - C_s)$$

Where:

- C_e = the Action Level ($\mu\text{g/L}$)
- C_o = the water quality objective to be met at the completion of initial dilution ($\mu\text{g/L}$)
- C_s = background seawater concentration ($\mu\text{g/L}$)
- D_m = minimum probable initial dilution expressed as parts seawater per part wastewater

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The D_m is based on observed waste flow characteristics, receiving water density structure, and the assumption that no currents of sufficient strength to influence the initial dilution process flow across the discharge structure. Initial dilution is the process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge. It is conservatively assumed that when non-storm water discharges to the surf zone occur, that conditions are such that no rapid mixing would occur. Therefore, an initial dilution is not allowed and the formula above reduces to:

$$C_e = C_o$$

The following demonstrates how the action levels for copper are established.

Copper

$C_e = 3 \mu\text{g/L}$ (6-Month Median)

$C_e = 12 \mu\text{g/L}$ (Daily Maximum)

$C_e = 30 \mu\text{g/L}$ (Instantaneous Maximum)

ii. Applicability of Action Levels

The action levels included in this Order apply to pollutants in non-storm water discharges from the MS4 to receiving waters that are not already subject to WQBELs to implement TMDL wasteload allocations applicable during dry weather.

This Order requires outfall-based monitoring throughout each Watershed Management Area, including monitoring during dry weather. The dry weather monitoring data will be evaluated by the Permittee(s) in comparison to all applicable action levels.

iii. Requirements When Action Levels are Exceeded

When monitoring data indicates an action level is exceeded for one or more pollutants, then the Permittee will be required to implement actions to identify the source of the non-storm water discharge, and depending on the identified source, implement an appropriate response. With respect to action levels, the Permittee will have identified appropriate procedures within the Watershed Management Program (Part VI.C) and the Illicit Connection and Illicit Discharge Elimination Program (Part VI.D.9).

G. New Development/Re-Development Tracking

This Order requires the use of Low Impact Development (LID) designs to reduce storm water runoff (and pollutant discharges) from new development or re-development projects. In areas that drain to water bodies that have been armored or are not natural drainages, the goal of this requirement is to protect water quality by retaining on-site the

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storm water runoff from the 85th percentile storm event. This is the design storm used throughout most of California for water quality protection. If it is not technically feasible due to site constraints (e.g., close proximity to a drinking water supply, slope instability) or if instead the project proponent is proposing to supplement a groundwater replenishment project, the project proponent may provide treatment BMPs to reduce pollutant loading in storm water runoff from the project site. Flow through treatment BMPs are less effective in reducing pollutant loadings than on-site retention for the design storm. Therefore the project proponent must mitigate the impacts further by providing for LID designs at retrofit projects or other off-site locations within the same subwatershed. The effectiveness monitoring is designed to assess and track whether post construction operation of the LID designs are effective in retaining the design storm runoff volume.

For projects located in natural drainages, the goal of the LID design is to retain the pre-development hydrology, unless a water body is not susceptible to hydromodification effects (e.g., estuaries or the ocean). Smaller projects that will disturb less than 50 acres of land are presumed to meet the criteria if the project retains the storm water runoff from the 95th percentile storm. The effectiveness monitoring in this situation should be design to confirm that storm water runoff is not occurring for any storm at or less than the 95th percentile storm. Projects may also demonstrate compliance by showing that the erosion potential will be approximately 1 as described in Attachment J of this Order. For larger projects, the project proponent may be required to conduct modeling to demonstrate compliance by comparing the hydrographs of a two-year storm for the pre-development and post-development conditions, or by comparing the flow duration curves for a reference watershed and the post project condition. Flow monitoring will be required to substantiate the simulated hydrographs or flow duration curves.

Monitoring studies conducted by the California Department of Public Health (CDPH) have documented that mosquitoes opportunistically breed in structural storm water Best Management Practices (BMPs), particularly those that hold standing water for over 96 hours. Certain Low Impact Development (LID) site design measures that hold standing water such as rainwater capture systems may similarly produce mosquitoes. BMPs and LID design features should incorporate design, construction, and maintenance principles to promote drainage within 96 hours to minimize standing water available to mosquitoes. This Order requires regulated MS4 Permittees to coordinate with other agencies necessary to successfully implement the provisions of this Order. These agencies may include CDPH and local mosquito and vector control agencies on vector-related issues surrounding implementation of post-construction BMPs.

This Order is not intended to prohibit the inspection for or abatement of vectors by the State Department of Public Health or local vector agencies in accordance with CA Health and Safety Code, § 116110 et seq. and Water Quality Order No. 2012-0003-DWQ.

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H. Regional Studies

1. Southern California Stormwater Monitoring Coalition Watershed Monitoring Program

As a condition to this Order, Permittees must participate in the bioassessment studies conducted under the Southern California Stormwater Monitoring Coalition Watershed Monitoring Program. Bioassessment provides a direct measure of whether aquatic life beneficial uses are fully supported and integrates the effects of multiple factors including pollutant discharges, changes in hydrology, geomorphology, and riparian buffers.

I. Aquatic Toxicity Monitoring Methods

Based on the stated goals of the CWA, the USEPA and individual states implement three approaches to monitoring water quality. These approaches include chemical-specific monitoring, toxicity testing, and bioassessments (USEPA 1991a). Each of the three approaches has distinct advantages and all three work together to ensure that the physical, chemical and biological integrity of our waters are protected. Water quality objectives have been developed for only a limited universe of chemicals. For mixtures of chemicals with unknown interactions or for chemicals having no chemical-specific objectives, the sole use of chemical-specific objectives to safeguard aquatic resources would not ensure adequate protection. Aquatic life in southern California coastal watersheds are often exposed to nearly 100% effluent from wastewater treatment plants, urban runoff, or storm water; therefore, toxicity testing and bioassessments are also critical components for monitoring programs as they offer a more direct and thorough confirmation of biological impacts. The primary advantage of using the toxicity testing approach is that this tool can be used to assess toxic effects (acute and chronic) of all the chemicals in aqueous samples of effluent, receiving water, or storm water. This allows the cumulative effect of the aqueous mixture to be evaluated, rather than the toxic responses to individual chemicals (USEPA, EPA Regions 8, 9, and 10 Toxicity Training Tool, January 2010).

Based on available data from the LA County MS4 Permit Annual Monitoring Reports, samples collected at mass emissions stations during both wet weather and dry weather have been found to be toxic in the San Gabriel River, Coyote Creek, the Los Angeles River, Dominguez Channel, Ballona Creek, Malibu Creek, and the Santa Clara River, demonstrating the need for this toxicity monitoring requirement (see Table below).

Summary of Toxicity by Watershed							
Source and Season	San Gabriel River	Coyote Creek	Los Angeles River	Dominguez Channel	Ballona Creek	Malibu Creek	Santa Clara River
Integrated Receiving Water Impacts Report (1994-2005)							
Wet Weather	-	CDS, CDR, SUF	CDS, SUF	CDS, CDR, SUF	CDR, SUF	CDR	CDS
Dry	-	SUF	SUF	SUF	SUF	-	-

REVISITED TENTATIVE

Weather							
Annual Monitoring Reports (2005-2010)							
Wet Weather							
2005-06	-	-	SUF	CDS, CDR, SUF	SUF	-	-
2006-07	SUF	SUF	SUF	SUF	SUF	SUF	SUF
2007-08	SUF	-	-	SUF	-	CDS,CDR,SUF	SUF
2008-09	-	SUF	SUF	-	SUF	CDS,CDR,SUF	-
2009-10	-	-	-	-	-	-	-
Dry Weather							
2005-06	-	-	-	-	-	CDS,CDR	-
2006-07	-	-	-	-	SUF	-	-
2007-08	-	-	CDS,CDR	-	SUF	-	-
2008-09	-	-	SUF	-	-	-	-
2009-10	-	-	-	-	-	-	-

Notes:

- CDS= Ceriodaphnia survival toxicity
- SUF= Sea Urchin fertilization toxicity
- CDR= Ceriodaphnia reproduction toxicity

This Order requires Permittee(s) to conduct chronic toxicity tests on water samples, by methods specified in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002; Table IA, 40 CFR Part 136) or a more recent edition.

To determine the most sensitive test species, the Permittee(s) shall conduct two wet weather and two dry weather toxicity tests with a vertebrate, an invertebrate, and a plant. After this screening period, subsequent monitoring shall be conducted using the most sensitive test species. Alternatively, if a sensitive test species has already been determined, or if there is prior knowledge of potential toxicant(s) and a test species is sensitive to such toxicant(s), then monitoring shall be conducted using only that test species. Sensitive test species determinations shall also consider the most sensitive test species used for proximal receiving water monitoring. After the screening period, subsequent monitoring shall be conducted using the most sensitive test species. Rescreening shall occur in the fourth year of the permit term.

For brackish water, this Order requires the Permittee(s) to conduct the chronic toxicity test in accordance with USEPA's Short-Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to West Coast Marine and Estuarine Organisms, First Edition, August 1995, (EPA/600/R-95/136), or Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, Third Edition, October 2002, (EPA/821-R-02-014), or a more recent edition.

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Furthermore, the toxicity component of the Monitoring Program includes toxicity identification procedures so that pollutants that are causing or contributing to acute or chronic effects in aquatic life exposed to these waters can be identified and others can be discounted. TIEs are needed to identify the culprit constituents to be used to prioritize management actions. Where toxicants are identified in a MS4 discharge, the Order requires a Toxicity Reduction Plan (TRE).

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TRE development and implementation is directly tied to the integrated monitoring programs and watershed management program, to ensure that management actions and follow-up monitoring are implemented when problems are identified. Permittees are encouraged to coordinate TREs with concurrent TMDLs where overlap exists. If a TMDL is being developed or implemented for an identified toxic pollutant, much of the work necessary to meet the objectives of a TRE may already be underway, and information and implementation measures should be shared.

Overall, the toxicity monitoring program will assess the impact of storm water and non-storm water discharges on the overall quality of aquatic fauna and flora and implement measures to ensure that those impacts are eliminated or reduced. As stated previously, chemical monitoring does not necessarily reveal the totality of impacts of storm water on aquatic life and habitat-related beneficial uses of water bodies. Therefore, toxicity requirements are a necessary component of the MS4 monitoring program.

J. Special Studies

Requirements to conduct special studies as described in TMDL Implementation Plans that were approved by the Executive Officer of the Regional Water Board prior to the effective date of this Order are incorporated into this Order by reference.

K. Annual Reporting

The Annual Reporting requirement was also required in Order No. 01-182 and provides summary information to the Regional Water Board on each Permittee's participation in one or more Watershed Management Programs; the impact of each Permittee(s) storm water and non-storm water discharges on the receiving water; each Permittee's compliance with receiving water limitations, numeric water quality based effluent limitations, and non-storm water action levels; and the effectiveness of each Permittee(s) control measures in reducing discharges of pollutants from the MS4 to receiving waters. In addition the Annual Report allows the Regional Water Board to assess whether the quality of MS4 discharges and the health of receiving waters is improving, staying the same, or declining as a result watershed management program efforts, and/or TMDL implementation measures, or other Control Measures and whether changes in water quality can be attributed to pollutant controls imposed on new development, re-development, or retrofit projects. The Annual Report provides the Permittee(s) a forum to discuss the effectiveness of its past and ongoing control measure efforts and to convey its plans for future control measures as well as a way to present data and conclusions in a transparent manner so as to allow review and

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understanding by the general public. Overall the Annual Report allows Permittee’s to focus reporting efforts on watershed condition, water quality assessment, and an evaluation of the effectiveness of control measures.

L. Watershed Summary Information, Organization and Content

As a means to establish a baseline and then identify changes or trends, for each watershed, each Permittee shall provide the information on its watershed management area, subwatershed area, and drainage areas within the subwatershed area in its odd year Annual Report (e.g., Year 1, 3, 5). The requested information should be provided for each watershed within the Permittee’s jurisdiction. Alternatively, permittees participating in a Watershed Management Program may provide the requested information through the development and submission of a Watershed Management Program report or within a TMDL Implementation Plan Annual Report. However, in either case, the Permittee shall bear responsibility for the completeness and accuracy of the referenced information. This reporting requirement helps to ensure that both the Permittee and the Regional Water Board have up to date information on the status of each of their watersheds and subwatersheds.

M. Jurisdictional Assessment and Reporting

The requested information shall be provided for each watershed within the Permittee’s jurisdiction. Annual Reports submitted on behalf of a group of Watershed Permittees shall clearly identify all data collected and strategies, control measures, and assessments implemented by each Permittee within its jurisdiction as well as those implemented by multiple Permittees on a watershed scale. Permittees must provide information on storm water control measures, an effectiveness assessment of storm water control measures, information on non-storm water control measures, an effectiveness assessment of non-storm water control measures, an integrated monitoring compliance report, information on adaptive management strategies, and supporting data and information. The addition of this reporting requirement serves as a mechanism to evaluate and ensure the protection of receiving water quality on a watershed scale. If Permittees do not elect to develop a Watershed Management Program, all required information shall be provided by the Permittee for its jurisdiction.

N. TMDL Reporting

Reporting requirements included in this Order and Attachment E (MRP) were established during the TMDL development process for each individual TMDL. These reporting requirements have incorporated into this Order to implement TMDL requirements.

XIV. CALIFORNIA WATER CODE SECTION 13241

California Water Code section 13241 requires the Regional Water Board to consider certain factors, including economic considerations, in the adoption of water quality objectives. California Water Code section 13263 requires the Board to take into consideration the provisions of section 13241 in adopting waste discharge requirements. In *City of Burbank v.*

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State Water Resources Control Board (2005) 35 Cal.4th 613, the California Supreme Court considered whether regional water boards must comply with section 13241 when issuing waste discharge requirements under section 13263(a) by taking into account the costs a permittee will incur in complying with the permit requirements. The Court concluded that whether it is necessary to consider such cost information “depends on whether those restrictions meet or exceed the requirements of the federal Clean Water Act.” (*Id.* at p. 627.) The Court ruled that regional water boards may not consider the factors in section 13241, including economics, to justify imposing pollutant restriction that are less stringent than the applicable federal law requires. (*Id.* at pp. 618, 626-627 “[Water Code s]ection 13377 specifies that [] discharge permits issued by California’s regional boards must meet the federal standards set by federal law. In effect, section 13377 forbids a regional board’s consideration of any economic hardship on the part of the permit holder if doing so would result in the dilution of the requirements set by Congress in the Clean Water Act...Because section 13263 cannot authorize what federal law forbids, it cannot authorize a regional board, when issuing a [] discharge permit, to use compliance costs to justify pollutant restrictions that do not comply with federal clean water standards”].) However, when the pollutant restrictions in an NPDES permit are more stringent than federal law requires, California Water Code section 13263 requires that the Water Boards consider the factors described in section 13241 as they apply to those specific restrictions.

The Regional Water Board finds that the requirements in this Order are not more stringent than the minimum federal requirements. Among other requirements, federal law requires MS4 permits to include requirements to effectively prohibit non-storm water discharges into the storm sewers, in addition to requiring controls to reduce the discharge of pollutants in storm water to the maximum extent practicable and other provisions that the agency determines are necessary for the control of pollutants in MS4 discharges. The requirements in this Order may be more specific or detailed than those enumerated in federal regulations under 40 CFR § 122.26 or in USEPA guidance. However, the requirements have been designed to be consistent with and within the federal statutory mandates described in Clean Water Act section 402(p)(3)(B)(ii) and (iii) and the related federal regulations and guidance. Consistent with federal law, all of the conditions in this Order could have been included in a permit adopted by USEPA in the absence of the in lieu authority of California to issue NPDES permits. Moreover, the inclusion of numeric WQBELs in this Order does not cause the permit to be more stringent than current federal law. Federal law authorizes both narrative and numeric effluent limitations to meet state water quality standards. The inclusion of WQBELs as discharge specifications in an NPDES permit in order to achieve compliance with water quality standards is not a more stringent requirement than the inclusion of BMP based permit limitations to achieve water quality standards. (State Water Board Order No. WQ 2006-0012 (*Boeing*).) Therefore, consideration of the factors set forth in section 13241 is not required for permit requirements that implement the effective prohibition on the discharge of non-storm water discharges into the MS4, or for controls to reduce the discharge of pollutants in storm water to the maximum extent practicable, or other provisions that the Regional Water Board has determined appropriate to control such pollutants, as those requirements are mandated by federal law..

Notwithstanding the above, the Regional Water Board has considered the factors set forth in California Water Code section 13241 in issuing this Order. That analysis is provided below. The Regional Water Board has also considered all of the evidence that has been

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presented to the Board regarding the section 13241 factors in adopting this Order. The Regional Water Board finds that the requirements in this Order are reasonably necessary to protect beneficial uses identified in the Basin Plan, and the economic information related to costs of compliance and other section 13241 factors are not sufficient to justify failing to protect those beneficial uses. Where appropriate, the Regional Water Board has provided Permittees with additional time to implement control measures to achieve final WQBELs and/or water quality standards.

A. Past, present and probable future beneficial uses of water.

Chapter 2 of the Basin Plan identifies designated beneficial uses for water bodies in the Los Angeles Region, which are the receiving waters for MS4 discharges. Beneficial uses are also identified in the findings of this Order and further discussed relative to TMDLs in section VI.D of this Fact Sheet.

B. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.

Environmental characteristics of each of the Watershed Management Areas covered by this Order, including the quality of water, are discussed in the Region's Watershed Management Initiative Chapter as well as available in State of the Watershed reports and the State's CWA Section 303(d) List of impaired waters.

- ❖ Santa Clara River Watershed Management Area
www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/wmi/santa_clara_river_watershed/santa_clara_river_watershed.doc
- ❖ Santa Monica Bay Watershed Management Area
www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/wmi/santa_monica_bayWMA/santa_monica_bayWMA.doc
- ❖ Dominguez Channel Watershed Management Area
www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/wmi/dominguez_channelWMA/dominguez_channelWMA.doc
- ❖ Los Angeles River Watershed Management Area
www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/wmi/los_angeles_river_watershed/los_angeles_river_watershed.doc
- ❖ San Gabriel River Watershed Management Area
www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/wmi/san_gabriel_river_watershed/san_gabriel_river_watershed.doc
- ❖ Los Cerritos Channel and Alamitos Bay Watershed Management Area
www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/wmi/los_cerritos_channelWMA/los_cerritos_channelWMA.doc
- ❖ Middle Santa Ana River Watershed Management Area
http://www.waterboards.ca.gov/santaana/water_issues/programs/wmi/index.shtml
<http://www.sawpa.org/watershedinfo.html>

The quality of water in receiving waters for MS4 discharges has been routinely monitored by Permittees through the Monitoring and Reporting Program under Order No. 01-182.

Below are summaries of water quality exceedances reported for the 2010-2011 reporting year.

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Summary of Constituents that Did Not Meet Water Quality Objectives at Mass Emission Stations during 2010-2011 for One or More Events

Mass Emission/Watershed	Wet	Dry
Ballona Creek (S01)¹	Fecal coliforms ² pH ³ Dissolved zinc	pH ³
Malibu Creek (S02)	Fecal coliforms Cyanide pH ³ Sulfate	Fecal coliforms Sulfate
Los Angeles River (S10)¹	Fecal coliforms ² pH ³ Dissolved zinc Cyanide	Fecal coliforms pH ³
Coyote Creek (S13)	Fecal coliforms ² pH ³ Dissolved zinc	Fecal coliforms
San Gabriel River (S14)	Fecal coliforms ² pH ³	
Dominguez Channel (S28)¹	Fecal coliforms ² Dissolved copper Dissolved zinc	Fecal coliforms pH ³
Santa Clara River (S29)	Fecal coliforms pH ³ Dissolved zinc	

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¹ More urbanized watersheds.

² Subject to the fecal coliform water quality objective high-flow suspension (LARWQCB, 2003).

³ pH was evaluated outside of holding time.

The following table summarizes the results of an analysis based on evaluation of the 15 sets of dry weather data for the period of 2005 to 2011 for each of the mass emission stations. The most prevalent pollutants of concern among the mass emission stations include fecal coliform bacteria, cyanide, mercury, chloride, sulfate, total dissolved solids, copper, and selenium. Reported results for fecal coliform bacteria, cyanide, copper, and selenium concentrations consistently exceeded water quality objectives in all watersheds. For watersheds where objectives apply for sulfate and total dissolved solids, the receiving water concentrations consistently exceeded the objectives. The incidences where exceedances are indicated for mercury are largely due to analytical detection levels that were higher than the applicable objective.

Summary of LA County Watersheds and Frequency of Receiving Water Exceeding Water Quality Objectives (2005 to 2011 - Dry Season Data Analysis)¹

Parameter	Santa Clara River	Los Angeles River	Dominguez Channel	Ballona Creek	Malibu Creek	San Gabriel River	
						Upper Portion	Lower Portion
pH	0/15	7/15	5/15	3/15	0/15	1/14	2/15
Total Coliform	No FW Objective	No FW Objective)	No FW Objective	No FW Objective	No FW Objective	No FW Objective	No FW Objective
Fecal Coliform	4/15	4/15	10/15	13/15	6/15	11/14	13/15
Enterococcus	No FW Objective	No FW Objective	No FW Objective	No FW Objective	No FW Objective	No FW Objective	No FW Objective
Chloride	15/15	15/15	No Objective	0/15	0/15	14/14	15/15
Dissolved Oxygen	1/15	0/15	0/15	0/15	0/15	1/14	0/15
Nitrate-N	0/15	0/15	No Objective	No Objective	0/15	7/14	No Objective
Nitrite-N	0/15	3/15	No Objective	No Objective	0/15	0/15	No Objective
Methylene Blue Active Substances	4/15	0/15	No Objective	No Objective	0/15	0/14	No Objective
Sulfate	15/15	15/15	No Objective	No Objective	15/15	14/14	15/15
Total Dissolved Solids	15/15	15/15	No Objective	No Objective	13/15	14/14	15/15
Turbidity ²	0/15	2/15	No Objective	No Objective	0/15	0/15	0/15
Cyanide	11/15	14/15	4/15	15/15	3/15	14/14	15/15
Total Aluminum	1/15	2/15	No Objective	No Objective	0/15	1/14	No Objective
Dissolved Copper	0/15	0/15	5/15	0/15	0/15	13/14	0/15
Total Copper	1/15	6/15	11/15	3/15	0/15	13/14	2/15
Dissolved Lead	0/15	0/15	0/15	0/15	0/15	1/14	0/15
Total Lead	0/15	0/15	1/15	1/15	0/15	13/14	0/15
Total Mercury	15/15	14/15	14/15	15/15	15/15	14/14	15/15
Dissolved Mercury	15/15	15/15	15/15	15/15	15/15	14/14	14/14
Total Nickel	0/15	0/15	0/15	0/15	0/15	1/14	0/15
Dissolved Selenium	2/15	2/15	1/15	2/15	6/15	1/15	10/11
Total Selenium	2/15	2/15	1/15	2/15	6/15	1/15	10/11
Dissolved Zinc	0/15	0/15	0/15	0/15	0/15	7/10	0/15
Total Zinc	0/15	0/15	0/1)	0/15	0/15	10/10	0/15

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1. Frequency of exceedance is denoted as number of exceedances/number of dry weather samples evaluated. For example, “2/15” indicates 2 of the 15 samples had analytical results that exceeded the water quality objective for a given parameter.
2. The Basin Plan water quality objective for turbidity for the protection of MUN is the secondary MCL of 5 NTU. The Basin Plan contains additional turbidity objectives expressed as incremental changes over natural conditions. Since inadequate data were available to assess criteria expressed as incremental changes, only the MCL was considered in the analysis.
3. FW means freshwater

C. *Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.*

Since 2001, municipalities both locally and nationally have gained considerable experience in the management of municipal storm water and non-storm water discharges. The technical capacity to monitor storm water and its impacts on water quality has also increased. In many areas, monitoring of the impacts of storm water on water quality has become more sophisticated and widespread. Better information on the effectiveness of storm water controls to reduce pollutant loadings and address water quality impairments is now available. The International Stormwater BMP Database (<http://www.bmpdatabase.org/>) provides extensive information of the performance capabilities of storm water controls. Additionally, the County of Los Angeles conducted a BMP effectiveness study as a requirement of Order No. 01-182.⁴

Generally, improvements in the quality of receiving waters impacted by MS4 discharges can be achieved by reducing the volume of storm water or non-storm water discharged through the MS4 to receiving waters; reducing pollutant loads to storm water and non-storm water through source control/pollution prevention, including operational source control such as street sweeping, public education, and product or materials elimination or substitution; and removing pollutants that have been loaded into storm water or non-storm water before they enter receiving waters, through treatment or diversion to a sanitary sewer. The following factors are generally accepted to affect pollutant concentrations in MS4 discharges⁵:

- Land use
- Climatic conditions
- Season (i.e. for southern California, dry season and winter wet season)
- Percentage imperviousness (in particular, “effective impervious area” or “EIA”)
- Rainfall amount and intensity (including seasonal “first-flush” effects)
- Runoff amount
- Watershed size
- Motor vehicle operation
- Aerial deposition

⁴ County of Los Angeles Department of Public Works. “Los Angeles County BMP Effectiveness Study,” August 2005.

⁵ Maestre, Alexander and Robert Pitt. “Identification of Significant Factors Affecting Stormwater Quality Using the NSQD” (draft monograph, 2005).

In their 2010-2011 Annual Report, Permittees identified the following storm water and non-storm water pollutant control measures as particularly effective:

- Street sweeping;
- Catch basin cleaning;
- Catch basin inserts
- Trash bins;
- End-of-pipe controls such as low-flow diversions;
- Infiltration controls;
- Erosion controls; and
- Public education and outreach, including multi-lingual strategies.

Permittees summarized the most-used BMPs and most popular BMPs (according to the number of Permittees using a particular BMP) in their 2010-2011 Annual Report. An itemization of all BMPs installed and maintained during the 2010-11 reporting period is provided in Appendices B and C of the Permittees' Annual Report.

Most installed BMPs County-wide During 2010-11

BMP Type	Total Number Installed
Catch Basin Connector Pipe Full Capture (CPS)	6377
Fossil Filter Catch Basin Insert	5968
Automatic Retractable Catch Basin Trash Screen (ARS)	3870
Clean Screen Catch Basin Insert	3767
Extra Trash Can	3681
Covered Trash Bin	3119
Signage and Stenciling	1884
Drain Pac Catch Basin Insert	1625
CulTec Infiltration Systems	1296
Infiltration Trenches	963
Infiltration Pit	958
Abtech Ultra Urban Catch Basin Insert	748
CDS Gross Pollutant Separator	438
United Storm Water Catch Basin Scree Inserts	403
Restaurants Vent Traps	258
Stormceptor Gross Pollutant Separators	211

Most Used Proprietary and Non-Proprietary BMPs During 2010-11

Types of Nonproprietary BMPs Used By Most Permittees		Types Proprietary BMPs Used By Most Permittees	
BMP Type	No. of Cities	BMP Type	No. of Cities
Infiltration Trenches	40	Fossil Filter Catch Basin	46

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		Inserts	
Covered Trash Bins	32	CDS Gross Pollutant Separator	36
Extra Trash Cans	31	Drain Pac Catch Basin Insert	21
Enhanced Street Sweeping	26	Clean Screen Catch Basin Insert	21
Dog Parks	23	Stormceptor Gross Pollutant Separator	19

Some of the many advances in how to effectively control storm water and pollutants in storm water have occurred locally within the Los Angeles Region and include the development of cost effective trash full capture devices, storm water diversion, treatment and beneficial use facilities such as SMURRF and storm water capture, storage, and reuse facilities such as Sun Valley, low impact development/site design practices, and innovative/opportunistic culvert inlet multi-media filters. There are many other case studies of municipalities that have implemented innovative and effective storm water management measures (e.g., Portland, OR).

This Order is designed to reduce pollutant loading to waterbodies within Los Angeles County from discharges to and from the Los Angeles County MS4 through the implementation of multi-faceted storm water management programs at the municipal and watershed levels. Overall improvements in MS4 discharge quality are expected to occur over time with ongoing implementation of the Los Angeles County MS4 Permit. However, currently little information on the quality of storm water in the region and the water quality that can be achieved with the coordinated control of all MS4 discharges through full implementation of all storm water management measures by individual municipalities and collectively by all Permittees within a watershed is available. This Order, however, is designed to effectively focus and broaden monitoring requirements with the addition of outfall monitoring and monitoring associated with the 33 TMDLs being incorporated, so pollutant loading from the MS4 can be better quantified and improvements in water quality resulting from implementation of storm water management measures can be tracked.

D. Economic considerations.

The Regional Water Board recognizes that Permittees will incur costs in implementing this Order above and beyond the costs from the Permittees' prior permit. Such costs will be incurred in complying with the post-construction, hydromodification, Low Impact Development, TMDL, and monitoring and reporting requirements of this Order. The Regional Water Board also recognizes that, due to California's current economic condition, many Permittees currently have limited staff and resources to implement actions to address its MS4 discharges. Based on the economic considerations below, the Board has provided

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permittees a significant amount of flexibility to choose how to implement the permit. This Order allows Permittees the flexibility to address critical water quality priorities, namely discharges to waters subject to TMDLs, but aims to do so in a focused and cost-effective manner while maintaining the level of water quality protection mandated by the Clean Water Act and other applicable requirements. For example, the inclusion of a watershed management program option allows Permittees to submit a plan, either individually or in collaboration with other Permittees, for Regional Water Board Executive Officer approval that would allow for actions to be prioritized based on specific watershed needs. The Order also allows Permittees to customize monitoring requirements, which they may do individually, or in collaboration with other Permittees. In the end, it is up to the permittees to determine the effective BMPs and measures needed to comply with this Order. Permittees can choose to implement the least expensive measures that are effective in meeting the requirements of this Order. This Order also does not require permittees to fully implement all requirements within a single permit term. Where appropriate, the Board has provided permittees with additional time outside of the permit term to implement control measures to achieve final WQBELs and/or water quality standards. Lastly, this Order includes several reopener provisions whereby the Board can modify this Order based on new information gleaned during the term of this Order.

Before discussing the economics associated with regulating MS4 discharges, it should be noted that there are instances outside of this Order where the Board previously considered economics. First, when the Board adopted the water quality objectives that serve as the basis for several requirements in this Order, it took economic considerations into account. (See *In re Los Angeles County Municipal Storm Water Permit Litigation* (Sup. Ct. Los Angeles County, March 24, 2005, Case No. BS 080548), Statement of Decision from Phase II Trial on Petitions for Writ of Mandate, p. 21.) Second, the cost of complying with TMDL wasteload allocations has been previously considered during the adoption of each TMDL. The costs of complying with the water quality based effluent limitations and receiving water limitations derived from the 33 TMDLs, which are incorporated into this Order, are not additive. For example, the costs estimated for compliance with a TMDL for one pollutant in a watershed, such as metals, can be applied to the costs to achieve compliance with a TMDL for another pollutant in the same watershed, such as pesticides, because the same implementation strategies can be used for both pollutants. Several MS4 permittees have recognized this opportunity in the multi-pollutant TMDL implementation plans they have submitted (e.g. Ballona Creek Metals/Bacteria TMDLs and Machado Lake Pesticides/Nutrients TMDLs). In other words, the estimated cost of complying with the Ballona Creek Metals TMDL can apply to metals, pesticides, PCBs, and bacteria. The costs for complying with trash TMDLs are based on different implementation strategies (e.g., full capture devices), but those strategies are effective at removing metals and toxic pollutants as well. Thus, the costs estimated for each TMDL should not be added to determine the cost of compliance with all TMDLs. The staff reports for the various TMDLs include this disclaimer, and also discuss the cost efficiencies that can be achieved by treating multiple pollutants. Further, the Board's considerations of economics in developing each TMDL have often resulted in lengthy implementation schedules to achieve water quality standards. Where appropriate, these implementation schedules have been used to justify compliance schedules in this Order.

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Economic Considerations of Regulating MS4 Discharges

It is very difficult to determine the true cost of implementing storm water and urban runoff management programs because of highly variable factors and unknown level of implementation among different municipalities and inconsistencies in reporting by Permittees. In addition, it is difficult to isolate program costs attributable to permit compliance. Reported costs of compliance for the same program element can vary widely from Permittee to Permittee, often by a very wide margin that is not easily explained. Despite these problems, efforts have been made to identify storm water and urban runoff management program costs, which can be helpful in understanding the costs of program implementation.

Economic considerations of implementing this Order were examined by primarily utilizing the data that are self-reported by the Permittees in their annual reports and a State Water Board funded study, which examined the costs of municipal MS4 programs statewide.⁶ The economic impact to public agencies was tabulated based on the reported costs of implementing the six minimum control measures (Public Information and Participation, Industrial/Commercial Facilities Control, Development Planning, Development Construction, Public Agency Activities, and Illicit Connections and Illicit Discharges Elimination) required by 40 CFR section 122.26(d)(2)(iv) as well as costs associated with program management, monitoring programs, and a category described as other. As noted above, Permittees report wide variability in the cost of compliance, which is not easily explained. Based on reported values, the average annual cost to the Permittees in 2010-11 was \$4,090,876 with a median cost of \$687,633.

It is important to note that reported program costs are not all solely attributable to compliance with requirements of the LA County MS4 Permit. Many program components, and their associated costs, existed before the first LA County MS4 Permit was issued in 1990. For example, storm drain maintenance, street sweeping and trash/litter collection costs are not solely or even principally attributable to MS4 permit compliance, since these practices have long been implemented by municipalities. Therefore, the true program cost related to complying with MS4 permit requirements is some fraction of the total reported costs. For example, after adjusting the total reported costs by subtracting out the costs for street sweeping and trash collection, the average annual cost to the Permittees was \$2,397,315 with a median cost of \$290,000.

These results are consistent with the State Water Board funded study ("State Water Board Study") that surveyed the costs to develop, implement, maintain and monitor municipal separate storm sewer system management and control programs in 2004.⁷ The objectives of the study were to: 1) document stormwater program costs and 2) assess alternative approaches to MS4 quality control. The six cities selected for the study were judged by

⁶ Data from NPDES Stormwater Cost Survey, prepared by the Office of Water Programs, California State University, Sacramento (January 2005) and the Los Angeles County Municipal Storm Water Permit (Order No. 01-182), Unified Annual Stormwater Report, 2010 – 2011, <http://ladpw.org/wmd/npdesrsa/annualreport/>

⁷ Currier, Brian K., Joseph M. Jones, Glenn L. Moeller. "NPDES Stormwater Cost Survey, Final Report", Prepared for California State Water Resources Control Board, California State University Sacramento, Office of Water Programs, January, 2005.

State Water Board staff as having good MS4 management programs, adequate accounting systems, and represented a variety of geographic locations, hydrologic areas, populations and incomes. The cities selected were Corona, Encinitas, Fremont, Fresno-Clovis Metropolitan Area, Sacramento and Santa Clarita. The results found that the annual total cost per household ranged from \$18 to \$46. The average cost was found to be \$35 and the median, \$36. The true mean, which is derived by dividing the total sample costs by the total sample number of households, is \$29 in 2002 dollars. This study was further examined and applied to the Ventura County MS4 Permit in *“Economic Considerations of the Proposed (February 25, 2008) State of California Regional Water Quality Control Board Los Angeles Region, Order 08-xxx, NPDES Permit No. CAS004002, Waste Discharge Requirements for Stormwater (Wet Weather) and Non-Stormwater (Dry Weather) Discharges from the Municipal Separate Storm Sewer Systems within the Ventura County Watershed Protection District, County of Ventura and the Incorporated Cities Therein,”* and found that when adjusted for inflation, the total annual cost to the MS4 Permittees ranged from \$7.15 to \$10.9 million, depending on the averaging method applied.

The State Water Board Study noted inherent limitations in the cost data quality. The most significant data quality limitation cited is that the costs provided by the municipalities were not sufficiently detailed or referenced to provide opportunity for independent review of the accuracy and completeness of the cost data. Similarly, the costs presented in the Los Angeles County Unified Annual Report (“Unified Annual Report”) are not presented with supporting data or references so that they can be independently reviewed. Some of the limitations of the reported cost data are illustrated by a comparison of monitoring costs in different sections of the Unified Annual Report. In the monitoring costs section, the total costs for monitoring, including sample collection, analytical results, and sampling station maintenance was \$713,409 for 2010-2011. In contrast, the same report showed the monitoring costs of \$9,008,460 in the Unified Cost Table. Absent further explanation in the Unified Annual Report, this suggests that the reported costs may not be reliable.

The State Water Board Study also found that certain stormwater implementation costs included activities that provide separate and additional municipal benefits such as street sweeping and storm drain and channel cleaning. The State Water Board Study indicated that the inclusion of these costs as stormwater implementation costs is not uniform across different municipalities. In order to assess the variability of costs reported by different municipalities under the same permit and determine if Los Angeles County MS4 Permittees are reporting costs for activities that provide municipal benefits beyond storm water management and permit compliance, Regional Water Board staff reviewed costs reported by Los Angeles County MS4 Permittees in the Unified Annual Report. The reported storm water costs range from \$11.45 to \$928.10 per household per year. The average reported cost was \$120.04 per household per year and the median cost was \$57.31 per household per year. The wide spread of annual costs and the significant difference between the mean and median costs indicate that the LA County MS4 Permittees are not reporting costs in a uniform manner.

Board staff also reviewed available cost data in the Unified Annual Report for Permittees that provided separate costs regarding street sweeping and trash collection. Staff adjusted the total costs so that the costs for these multi-benefit municipal programs were not included in the storm water cost and found that the adjusted storm water costs were greatly

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reduced by excluding these activities. These adjusted costs ranged from \$0.00 per household per year to \$903.10 per household per year. The mean adjusted rate is \$42.57 per household per year and the median adjusted rate is \$17.89 per household per year. Clearly, a significant portion (greater than 50%) of the costs attributed to storm water compliance activities also provide additional municipal benefits. (In the case of the Los Angeles County MS4 Permittees, some municipalities reported costs for trash collection; these costs were not reported by municipalities in the State Water Board Study.)

Finally, Board staff reviewed the cost breakdowns reported in the State Water Board Study and the Unified Annual Report for Los Angeles County MS4 Permittees. The following table summarizes the results:

Cost Category	State Water Board Study	Los Angeles County (2010-2011)
Watershed Management	6%	5%
Construction	11%	1%
Illicit Discharge	4%	2%
Industrial and Commercial	8%	1%
Overall Management	37%	5%
Pollution Prevention	2%	2%
Post Construction	3%	
Public Education	13%	2%
Monitoring	16%	3%
BMP Maintenance	Not Reported	2%
Development	Not Reported	1%
Other	Not reported	76%

The reported costs show differences between the MS4 Permittees surveyed in the State Water Board Study and the Los Angeles County MS4 Permittee costs in the following categories: construction, industrial and commercial activities, public education and monitoring. These categories all show greater proportional statewide cost allocations relative to the cost allocations by the Los Angeles County MS4 Permittees. The Los Angeles County MS4 Permittees report a cost category of BMP maintenance, which is not defined in the State Water Board Study. The management costs in the State Water Board Study were greater than the management costs reported by the Los Angeles County MS4 Permittees, but the Los Angeles County MS4 Permittees also reported a category of "Other" that accounted for a large proportion of costs, which is not defined in the Unified Annual Report.

The State Water Board Study found that cost information is crucial in making management decisions regarding storm water requirements. The report also recommends that annual reports required under MS4 permits throughout the State follow a standard format for cost reporting and that costs for all MS4 program activities (per program area) should be identified as existing, enhanced or new according to the extent that the activity was required under the previous permit, is enhanced by the permit, or is exclusively a result of compliance efforts with new provisions of the MS4 permit.

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Further, there is an element of cost consideration inherent in the maximum extent practicable (MEP) standard. While the term “maximum extent practicable” is not specifically defined in the Clean Water Act or its implementing regulations, USEPA, courts, and the State Water Board have addressed what constitutes MEP. MEP is not a one-size fits all approach. Rather, MEP is an evolving, flexible, and advancing concept, which considers practicability. This includes technical and economic practicability. Compliance with the MEP standard involves applying BMPs that are effective in reducing or eliminating the discharge of pollutants in storm water to receiving waters. BMP development is a dynamic process, and the menu of BMPs may require changes over time as experience is gained and/or the state of the science and art progresses. MEP is the cumulative effect of implementing, evaluating, and making corresponding changes to a variety of technically appropriate and economically practicable BMPs, ensuring that the most appropriate controls are implemented in the most effective manner. The State Water Board has held that “MEP requires permittees to choose effective BMPs, and to reject applicable BMPs only where other effective BMPs will serve the same purpose, the BMPs would not be technically feasible, or the costs would be prohibitive.” (State Water Board Order WQ 2000-11.)

In addition to considering the costs of storm water management, it is important to consider the benefits of storm water and urban runoff management programs. A recent study conducted by USC/UCLA assessed the costs and benefits of implementing various approaches for achieving compliance with the MS4 permits in the Los Angeles Region. The study found that non-structural systems would cost \$2.8 billion but provide \$5.6 billion in benefit. If structural systems were determined to be needed, the study found that total costs would be \$5.7 to \$7.4 billion, while benefits could reach \$18 billion.⁸ Costs are anticipated to be borne over many years. As can be seen, the benefits of the programs are expected to considerably exceed their costs. Such findings are corroborated by USEPA, which found that the benefits of implementation of its Phase II storm water rule would also outweigh the costs.⁹

Economic ~~considerations~~-Considerations of Not Regulating MS4 Discharges:

Economic discussions of storm water and urban runoff management programs tend to focus on costs incurred by municipalities in developing and implementing the programs. This is appropriate, and these costs are significant and a major issue for the Permittees. However, in adopting Order WQ 2000-11, the State Water Board further found that in considering the cost of compliance, it is also important to consider the costs of impairment; that is, the negative impact of pollution on the economy and the positive impact of improved water quality. For example, economic benefits may result through program implementation, and alternative costs (as well as environmental impacts) may be incurred by not fully implementing the program. So, while it is appropriate and necessary to consider the cost of compliance, it is also important to consider the alternative costs incurred by not fully implementing the programs, as well as the benefits which result from program implementation.

⁸ LARWQCB, 2004. Alternative Approaches to Stormwater Control.

⁹ Federal Register / Vol. 64, No. 235 / Wednesday, December 8, 1999 / Rules and Regulations. P. 68791.

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The benefits of implementation of the Los Angeles County MS4 Permit include improvements in water quality, enhancement of beneficial uses, and increased employment, income and satisfaction from environmental amenities. Most of the benefits of this permit can be identified and, in some cases, quantified in monetary terms. Others cannot be expressed in dollar terms and can only be described. For example, household willingness to pay for improvements in fresh water quality for fishing and boating has been estimated by USEPA¹⁰ to be \$158-210.62. This estimate can be considered conservative, since it does not include important considerations such as marine waters benefits, wildlife benefits, or flood control benefits. The California State University, Sacramento study corroborates USEPA's estimates, reporting annual household willingness to pay for statewide clean water to be \$180.63.¹¹ When viewed in comparison to household costs of existing urban runoff management programs, these household willingness to pay estimates exhibit that per household costs incurred by Permittees to implement their urban runoff management programs remain reasonable.

Not regulating discharges from the Los Angeles County MS4 will result in greater pollution of rivers, streams, lakes, reservoirs, bays, harbors, estuaries, groundwater, coastal shorelines and wetlands. Urban runoff in southern California has been found to cause illness in people bathing near storm drains.¹² A study of south Huntington Beach and north Newport Beach found that an illness rate of about 0.8% among bathers at those beaches resulted in about \$3 million annually in health-related expenses.¹³ In addition, poor beach water quality negatively affects tourism, which in turn reduces revenues to local businesses.

Funding Sources.

Public agencies (both federal and state) recognize the importance of storm water improvement projects and have provided significant sources of funding through grants, bonds, and fee collections to help offset the costs of storm water management in Los Angeles County. The table below summarizes the funds that have been allocated to storm water management in Los Angeles County, to date.

Source of Money	Dollars	% of total costs funded by State (only for those projects which included State funding)
Only State Board-awarded funding (Propositions 12, 13, 40, 50, and 84; and federal money, 319h, 205j, ARRA)	\$49,143,132	47%
Only State money from any State agency (propositions only,	\$67,461,699	58%

¹⁰ Federal Register / Vol. 64, No. 235 / Wednesday, December 8, 1999 / Rules and Regulations. P. 68793.

¹¹ State Water Board, 2005. NPDES Stormwater Cost Survey. P. iv.

¹² Haile, R.W., et al, 1996. An Epidemiological Study of Possible Adverse Health Effects of Swimming in Santa Monica Bay. Santa Monica Bay Restoration Project.

¹³ Los Angeles Times, May 2, 2005. Here's What Ocean Germs Cost You: A UC Irvine Study Tallies the Cost of Treatment and Lost Wages for Beachgoers Who Get Sick.

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no federal); includes State Board, DWR, Coastal Conservancy, Fish & Game		
Total costs (approx.) for projects involving State money	\$114,703,731	N/A
Prop A	\$4,981,772	N/A
Prop O	\$508,678,258	N/A
Measure V	\$9,107,959	N/A
Total Public Funds (federal, State, local bonds and measures) expended on stormwater control projects	\$645,389,932	N/A (information not available for projects funded by local bonds and measures)

In addition to current funding options, future funding options continue to be created. Assembly Bill 2554, known as the Los Angeles County Flood Control District’s Water Quality Funding Initiative, is currently under consideration by the LACFCD’s Board of Supervisors. If the Board of Supervisors approve the fee proposal and no majority protest is received, then it will be submitted for voter approval and could create an estimated annual revenue of \$300 million to be utilized for various storm water projects including but not limited to:

- New and Existing Water Quality Projects and Programs
- Maintenance of Existing Facilities
- TMDL and MS4 Permit Implementation

Of the annual revenue, forty percent would be returned to the municipalities to create new local projects and programs and maintenance. Below are the estimated revenues that would be allocated to certain municipalities based on the estimated annual revenue of \$300 million.

Municipalities	Estimated Annual Revenue
City of Los Angeles	\$37 million
City of Santa Monica	\$1 million
El Segundo	\$600,000
Manhattan Beach	\$300,000
Redondo Beach	\$750,000
Unincorporated Areas on Los Angeles County	\$15 million

Fifty percent of the annual revenue would be spread across nine watershed authority groups (WAGs) to develop Water Quality Improvement Plans and implement regional projects and programs. Some examples of the possible annual revenues available to the WAGs are provided below:

WAG	Estimated Revenue
Santa Monica Bay	\$12 million
Upper Los Angeles River	\$36 million
Lower Los Angeles River	\$15 million

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Upper San Gabriel River	\$17 million
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The remaining ten percent of the annual revenues would be allocated to the Los Angeles County Flood Control District for administration of the program and other district water quality projects and programs.

E. Need for developing housing within the region.

For over 100 years, this region has relied on imported water to meet many of our water resource needs. Imported water makes up approximately 70 to 75% of the Southern California region’s water supply, with local groundwater, local surface water, and reclaimed water making up the remaining 25 to 30%.¹⁴ The area encompassed by this Order imports approximately 50% of its water supply. The Los Angeles County MS4 permit helps address the need for housing by controlling pollutants in MS4 discharges, which will improve the quality of water available for recycling and re-use. This in turn may reduce the demand for imported water thereby increasing the region’s capacity to support continued housing development.

A reliable water supply for future housing development is required by law, and with less imported water available to guarantee this reliability, an increase in local supply is necessary.

In this Order, the Regional Water Board supports integrated water resources approaches. An integrated water resources approach manages water resources by integrating wastewater, stormwater, recycled water, and potable water planning through the capture and beneficial use of stormwater. An integrated approach can preserve local groundwater resources and reduce imported water needs. Thus, complying with this Order can positively affect the need for developing housing in the region. Furthermore, the low impact development (LID) requirements of this MS4 permit emphasize the necessity to balance growth with the protection of water quality. LID emphasizes cost effective, lot-level strategies that replicate the natural hydrology of the site and reduces the negative impacts of development. By avoiding the installation of more costly conventional storm water management strategies and harnessing runoff at the source, LID practices enhance the environment while providing cost savings to both developers and local governments.

F. Need to develop and use recycled water.

Storm water runoff that travels across the urban landscape quickly becomes contaminated with the wastes inherent from urban living. This polluted water is then discharged to the surface waters and eventually the ocean where it wreaks havoc on the natural coastal ecosystem and impacts human health. If the storm water is captured and treated (or captured prior to contamination) a new resource could be added to local water supplies. If this water is more effectively harnessed and recycled, numerous benefits could be achieved. These include:

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¹⁴ Southern California Association of Governments. The State of the Region 2007 Measuring Regional Progress (Housing, Environment). December 6, 2007. <http://www.scaq.ca.gov/publications/index.htm>.

- Regional reduction on imported water;
- Aid in the restoration of area aquifers;
- Reduction in the need for extensive public works projects; and
- Improvement in the quality of impaired water bodies.

The exact volume of storm water available for capture is dependent on the intensity and duration of storm events. Looking at land uses across the region and applying land use-specific runoff coefficients, the annual average runoff in the Los Angeles subarea is 450,000 acre-feet/year (with an average annual rainfall of 15.5 inches). The Los Angeles and San Gabriel Rivers Watershed Council estimates that, on average, about 550,000 acre-feet/year of runoff are discharged from Los Angeles area to the ocean.¹⁵

It is not possible to capture all MS4 discharges; however, a significant portion could be put to beneficial use. Potentially, in Los Angeles, “[i]f we could capture 80% of the rainfall that falls on just a quarter of the urban area-15% of the total watershed-we would be reducing total runoff by approximately 30%. That translates into a diversion of 43 billion gallons of water per year (132,000 acre-feet) or enough to supply 800,000 people for a year.”¹⁶ That water capture would render a savings of almost sixty million dollars of imported State Water Project water. Capturing storm water from a larger portion of the watershed could increase the volume of this “new” water even further. Unlike traditional recycled water that requires the installation of dual plumbing and intensive infrastructure, much of the storm water capture could be done with minimal infrastructure retrofits in established communities.

Larger projects (and the corresponding savings) are also possible. The County of Los Angeles recharges storm water already. While the scale of these recharge activities is limited compared to the volume of water potentially available to recharge, the value of the process is significant. For example, in 2000 “County conservation efforts captured 220,000 acre-feet of local storm water runoff that was valued at \$80 million dollars.”¹⁷

The unknown effects of infiltrating stormwater to recharge ground water have created some concern that such activities could introduce pollutants to the water supply. However, the U.S. Bureau of Reclamation has found¹⁸:

“Based on the findings of the WAS research, decentralized stormwater management would provide a local and reliable supply of water that would not negatively impact groundwater quality. A decentralized approach could contribute up to 384,000 acre-feet of additional groundwater recharge annually if the first $\frac{3}{4}$ ” of each storm is infiltrated on all parcels, enough to provide water annually to approximately 1.5 million people. The value of this new water supply would be approximately \$311 million, using the MWD Tier 2 rate for 2010.”

Recent studies in the Los Angeles area have also shown that in the process of infiltration through the soil, many contaminants are removed with no immediate impacts, and no

¹⁵ http://www.lasgrwc.org/WAS/WASflyer_web.pdf

¹⁶ Los Angeles and San Gabriel River Watershed Council. 1999. *Stormwater: asset not liability*.

¹⁷ Los Angeles County Department of Regional Planning. 2008. 2008 Draft General Plan- Planning Tomorrow’s Great Places.

¹⁸ Los Angeles and San Gabriel River Watershed Council. 2010. *Water Augmentation Study: Research, Strategy, and Implementation Report*.

apparent trends to indicate that storm water infiltration will negatively impact groundwater.¹⁹ In areas with groundwater contamination issues, utilizing recycled storm water to recharge the aquifers may actually aid in the dilution of the buildup of salts. The value of this is hard to quantify but is an additional benefit. The use of recycled water can be accomplished in direct (such as irrigation projects or dual plumbing fixtures) or indirect (such as infiltration) ways. Both direct and indirect methods can be completed on a variety of different scales. To maximize the benefits available from using recycled water, the direct and indirect projects will need to be completed on household, neighborhood, watershed and regional scales. Currently there are a limited (but growing) number of projects in the region that can serve as examples of what may be accomplished through the development and implementation of recycled water projects. The Los Angeles County MS4 permit addresses the need for recycled water by controlling pollutants in storm water, which will result in water of improved quality with a greater potential for recycling or beneficial use. State law and policy advocates greatly expanding the use of recycled water to help meet local demand and reduce the volumes of water that are imported from other regions. Increased utilization of recycled water will require looking beyond the traditional reclaimed wastewater and will require utilizing storm water that is wasted by conveyance in the MS4 and dumping into the ocean. Storm water capture and use has not traditionally been included in the discussion of water recycling, but the process meets the definitional constraints and is bound by the same limitations and boundaries.

In addition, there are a number of Total Maximum Daily Loads (TMDLs) developed by the Regional Water Board that incorporate recycled water programs as potential implementation actions to meet TMDL requirements. These potential actions focus on both traditional water recycling and the newer storm water recycling approaches. Such recycled water programs could also reduce reliance on potable water supplies by expanding water recycling and aiding in the reclamation of poor quality, unconfined groundwater supplies. The capture, treatment and use of stormwater could augment these techniques as well. On-site capture of storm water helps prevent the water from being contaminated by urban by-products to begin with and the use of this high quality resource could reduce the unnecessary use of potable water for non-potable needs.

Some great examples of onsite capture are being demonstrated by TreePeople²⁰ who have demonstration projects ranging from small scale rainwater harvesting at the single family home locations, to large scale watershed projects at Tuxedo Green in Sun Valley where the project redesigned the intersection with a flood control system that conveys most stormwater under, instead of into, the busy intersection. The water is stored in a 45,000-gallon cistern to be used for irrigating the landscaping at the new pocket park, which is planted with native and drought-tolerant species.

Another state of the art project was implemented by the City of Santa Monica called the Santa Monica Urban Runoff Recycling Facility (SMURFF).²¹ The project harnesses the urban runoff (primarily during the dry season) and treats it for various pollutants to create a

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¹⁹ Los Angeles and San Gabriel River Watershed Council. 2005. Los Angeles Basin Water Augmentation Study Phase II Final Report.

²⁰ www.treepeople.org

²¹ <http://c0133251.cdn.cloudfiles.rackspacecloud.com/Case%20Study%20-%20Santa%20Monica%20Urban%20Runoff%20Recycling%20Facility%20SMURFF.pdf>

source of high quality water for reuse in landscape irrigation. Because the facility captures the dry weather runoff before it reaches the Santa Monica Bay it decreases a significant amount of pollutants from negatively impacting the Bay and associated beaches. The SMURFF is also open to the public and has several exhibits to raise public awareness of Santa Monica Bay pollution and the role of each individual in the watershed's health.

The County of Los Angeles Department of Public Works, Watershed Management Division has targeted the Sun Valley Watershed "...to solve the local flooding problem while retaining all storm water runoff from the watershed, increasing water conservation, recreational opportunities, wildlife habitat, and reducing stormwater pollution."²² This aggressive plan involves several stakeholders and has implemented a variety of on-site BMPs as well as storm water infiltration retrofits and diversions.

XV. STATE MANDATES

Article XIII B, Section 6(a) of the California Constitution provides that whenever "any state agency mandates a new program or higher level of service on any local government, the state shall provide a subvention of funds to reimburse that local government for the costs of the program or increased level of service." The requirements of this Order do not constitute state mandates that are subject to a subvention of funds for several reasons, including, but not limited to, the following.

First, the requirements of this Order do not constitute a new program or a higher level of service as compared to the requirements contained in the previous permit, Order No. 01-182 (as amended). The overarching requirement to impose controls to reduce the pollutants in discharges from MS4s is dictated by the Clean Water Act and is not new to this permit cycle. (33 U.S.C. §1342(p)(3)(B).) The inclusion of new and advanced measures as the MS4 programs evolve and mature over time is anticipated under the Clean Water Act (55 Fed.Reg. 47990, 48052 (Nov. 16, 1990)), and these new and advanced measures do not constitute a new program or higher level of service.

Second, and more broadly, mandates imposed by federal law, rather than by a state agency, are exempt from the requirement that the local agency's expenditures be reimbursed. (Cal. Const., art. XIII B, §9, subd. (b).) This Order implements federally mandated requirements under the Clean Water Act and its requirements are therefore not subject to subvention of funds. This includes federal requirements to effectively prohibit non-storm water discharges, to reduce the discharge of pollutants to the maximum extent practicable, and to include such other provisions as the Administrator or the State determines appropriate for the control of such pollutants. (30 U.S.C. §1342(p)(3)(B).) Federal cases have held these provisions require the development of permits and permit provisions on a case-by-case basis to satisfy federal requirements. (*Natural Resources Defense Council, Inc. v. U.S. E.P.A.* (9th Cir. 1992) 966 F.2d 1292, 1308, fn. 17.) The authority exercised under this Order is not reserved state authority under the Clean Water Act's savings clause (cf. *Burbank v. State Water Resources Control Bd.* (2005) 35 Cal.4th 613, 627-628 [relying on 33 U.S.C. § 1370, which allows a state to develop requirements

²² http://www.sunvalleywatershed.org/watershed_management_plan/wmp-0ES.pdf

which are not “less stringent” than federal requirements]), but instead is part of a federal mandate to develop pollutant reduction requirements for municipal separate storm sewer systems. To this extent, it is entirely federal authority that forms the legal basis to establish the permit provisions. (See, *City of Rancho Cucamonga v. Regional Water Quality Control Bd.-Santa Ana Region* (2006) 135 Cal.App.4th 1377, 1389; *Building Industry Ass’n of San Diego County v. State Water Resources Control Bd.* (2004) 124 Cal.App.4th 866, 882-883.)

The maximum extent practicable standard is a flexible standard that balances a number of considerations, including technical feasibility, cost, public acceptance, regulatory compliance, and effectiveness. (*Building Ind. Asso., supra*, 124 Cal. App.4th at pp. 873, 874, 889.) Such considerations change over time with advances in technology and with experience gained in storm water management. (55 Fed.Reg. 47990, 48052 (Nov. 16, 1990).) Accordingly, a determination of whether the conditions contained in this Order exceed the requirements of federal law cannot be based on a point by point comparison of the permit conditions and the six minimum control measures that are required “at a minimum” to reduce pollutants to the maximum extent practicable and to protect water quality (40 CFR § 122.34). Rather, the appropriate focus is whether the permit conditions, as a whole, exceed the maximum extent practicable standard. In recent months, the County of Los Angeles and County of Sacramento Superior Courts have granted writs setting aside decisions of the Commission on State Mandates that held that certain requirements in Phase I permits constituted unfunded mandates. In both cases, the courts found that the correct analysis in determining whether a MS4 permit constituted a state mandate was to evaluate whether the permit as a whole -- and not a specific permit provision -- exceeds the maximum extent practicable standard. (*State of Cal. v. Comm. on State Mandates* (Super. Ct. Sacramento County, 2012, No. 34-2010-80000604), *State of Cal. v. County of Los Angeles* (Super. Ct. Los Angeles County, 2011, No. BS130730).)

The requirements of the Order, taken as a whole rather than individually, are necessary to reduce the discharge of pollutants to the maximum extent practicable and to protect water quality. The Regional Water Board finds that the requirements of the Order are practicable, do not exceed federal law, and thus do not constitute an unfunded mandate. These findings are the expert conclusions of the principal state agency charged with implementing the NPDES program in California. (Cal. Wat. Code, §§ 13001, 13370.)

It should also be noted that the provisions in this Order to effectively prohibit non-storm water discharges are also mandated by the Clean Water Act. (33 U.S.C. § 1342(p)(3)(B)(ii).) Likewise, the provisions of this Order to implement total maximum daily loads (TMDLs) are federal mandates. The Clean Water Act requires TMDLs to be developed for water bodies that do not meet federal water quality standards. (33 U.S.C. § 1313(d).) Once the USEPA or a state establishes or adopts a TMDL, federal law requires that permits must contain effluent limitations consistent with the assumptions and requirements of any applicable waste load allocation in a TMDL. (40 CFR § 122.44(d)(1)(vii)(B).)

Third, the local agency Permittees’ obligations under this Order are similar to, and in many respects less stringent than, the obligations of non-governmental dischargers who are issued NPDES permits for storm water discharges. With a few inapplicable exceptions, the Clean Water Act regulates the discharge of pollutants from point sources (33 U.S.C.

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§ 1342) and the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) regulates the discharge of waste (Cal. Wat. Code, § 13263), both without regard to the source of the pollutant or waste. As a result, the “costs incurred by local agencies” to protect water quality reflect an overarching regulatory scheme that places similar requirements on governmental and non-governmental dischargers. (See *County of Los Angeles v. State of California* (1987) 43 Cal.3d 46, 57-58 [finding comprehensive workers compensation scheme did not create a cost for local agencies that was subject to state subvention].)

The Clean Water Act and the Porter-Cologne Act largely regulate storm water with an even hand, but to the extent there is any relaxation of this even-handed regulation, it is in favor of the local agencies. Generally, the Clean Water Act requires point source dischargers, including discharges of storm water associated with industrial or construction activity, to comply strictly with water quality standards. (33 U.S.C. § 1311(b)(1)(C), *Defenders of Wildlife v. Browner* (1999) 191 F.3d 1159, 1164-1165 [noting that industrial storm water discharges must strictly comply with water quality standards].) As discussed in prior State Water Resources Control Board decisions, certain provisions of this Order do not require strict compliance with water quality standards. (SWRCB Order No. WQ 2001-15, p. 7.) Those provisions of this Order regulate the discharge of waste in municipal storm water under the Clean Water Act MEP standard, not the BAT/BCT standard that applies to other types of discharges. These provisions, therefore, regulate the discharge of waste in municipal storm water more leniently than the discharge of waste from non-governmental sources.

Fourth, the Permittees have requested permit coverage in lieu of compliance with the complete prohibition against the discharge of pollutants contained in Clean Water Act section 301, subdivision (a) (33 U.S.C. § 1311(a)). To the extent that the local agencies have voluntarily availed themselves of the permit, the program is not a state mandate. (*Accord County of San Diego v. State of California* (1997) 15 Cal.4th 68, 107-108.)

Fifth, the local agencies’ responsibility for preventing discharges of waste that can create conditions of pollution or nuisance from conveyances that are within their ownership or control under state law predates the enactment of Article XIII B, Section (6) of the California Constitution.

Finally, even if any of the permit provisions could be considered unfunded mandates, under Government Code section 17556, subdivision (d), a state mandate is not subject to reimbursement if the local agency has the authority to charge a fee. The local agency Permittees have the authority to levy service charges, fees, or assessments sufficient to pay for compliance with this Order subject to certain voting requirements contained in the California Constitution. (See California Constitution XIII D, section 6, subdivision (c); see also *Howard Jarvis Taxpayers Association v. City of Salinas* (2002) 98 Cal. App. 4th 1351, 1358-1359.). Additional fee authority has recently been established through amendments to the Los Angeles County Flood Control Act (Chapter 755 of the Statutes of 1915, as amended by Assembly Bill 2554 (2010)) to provide funding for municipalities, watershed authority groups, and the LACFCD to initiate, plan, design, construct, implement, operate, maintain, and sustain projects and services to improve surface water quality and reduce storm water and non-storm water pollution in the LACFCD, which may directly support Permittees’ implementation of the requirements in this Order. The Fact Sheet demonstrates

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that numerous activities contribute to the pollutant loading in the municipal separate storm sewer system. Local agencies can levy service charges, fees, or assessments on these activities, independent of real property ownership. (See, e.g., *Apartment Ass'n of Los Angeles County, Inc. v. City of Los Angeles* (2001) 24 Cal.4th 830, 842 [upholding inspection fees associated with renting property].) The authority and ability of a local agency to defray the cost of a program without raising taxes indicates that a program does not entail a cost subject to subvention. (*Clovis Unified School Dist. v. Chiang* (2010) 188 Cal. App.4th 794, 812, quoting *Connell v. Superior Court* (1997) 59 Cal.App.4th 382, 401; *County of Fresno v. State of California* (1991) 53 Cal.3d 482, 487-488.)

XVI. PUBLIC PARTICIPATION

Regional Water Board staff held a kick-off meeting on May 25, 2011 to discuss the preliminary schedule for permit development; identify potential alternative permit structures; and outline some of the major technical and policy aspects of permit development. All LA County MS4 Permittees, as well as other known interested stakeholders, were invited to attend. Ninety-five individuals attended the meeting, representing most of the permittees as well as environmental organizations. After a presentation by Board staff, Permittees and interested persons had an initial opportunity to ask questions of staff, raise concerns, and provide feedback.

At the May 25, 2011 kick-off meeting, Board staff requested input from the attendees on various permit structures. In order to solicit more focused input from permittees on alternative permit structures, and per suggestions at the kick-off meeting, Board staff developed and distributed an on-line survey to permittees using the on-line survey tool, SurveyMonkey®. The survey was distributed to all Los Angeles County MS4 Permittees on June 14, 2011 and responses were requested within two weeks. Fifty-two permittees responded using the on-line survey tool. The on-line survey sought input on several options for permit structure, including an individual permit for each municipality, a single permit for all permittees (i.e., the existing permit structure), and a single or multiple watershed-based permits.

Regional Water Board staff also held three topical workshops on December 15, 2011, January 23, 2012, and March 1, 2012. At the December 2011 workshop, staff discussed and invited feedback on: tentative permit requirements for the “minimum control measures” that comprise Permittees core storm water management program, approaches to addressing non-storm water MS4 discharges, and options for flexibility in permit requirements to address watershed priorities. At the January 2012 workshop, staff discussed and invited feedback on: tentative permit requirements to implement TMDL waste load allocations assigned to MS4 discharges and monitoring and reporting requirements for this Order. At the March 2012 workshop, staff discussed the use of water quality-based effluent limitations in this Order, discussed a revised proposal for monitoring requirements based on comments from the January 2012 workshop, and provided additional detail on proposed minimum control measure requirements.

Three Regional Water Board workshops were held during regularly scheduled Board meetings on November 10, 2011, April 5, 2012, and May 3, 2012. At the November 2011 Board workshop, staff discussed the objectives for the new permit, the status and schedule

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for permit development, alternatives for permit structure, provisions to implement TMDL WLAs, and provisions for minimum control measures, and identified preliminary considerations related to provisions for non-storm water discharges, receiving water limitations, water quality-based effluent limitations, and requirements for monitoring and reporting.

Prior to the April 5, 2012 Board workshop, staff released complete working proposals of the permit provisions related to two key parts of this Order: the storm water management program “minimum control measures” and the non-storm water MS4 discharge prohibitions on March 21, 2012 and March 28, 2012, respectively. Staff provided Permittees and interested persons the opportunity to submit written and oral comments over a period of three weeks for early consideration by staff prior to the release of the tentative Order. At the April 2012 Board workshop, staff presented the working proposals and the Board invited public comments. Detailed comments were made on both working proposals, and in particular, comments were made on how to address “essential” non-storm water discharges from ~~potable drinking~~ water ~~supplies~~ supplier distribution systems and fire fighting activities in this Order.

Prior to the May 3, 2012 Board workshop, staff released complete working proposals of the permit provisions related to three other key parts of this Order: provisions for watershed management programs, TMDL-related requirements, and receiving water limitations language. Staff provided Permittees and interested persons the opportunity to submit written and oral comments over a period of three weeks for early consideration by staff prior to the release of the tentative Order. At the May 2012 Board workshop, staff presented the three working proposals and the Board invited public comments. Staff answered extensive questions from Board members following public comments.

In addition to staff and Board workshops, Regional Water Board staff met regularly with Permittees, including the LA Permit Group (a coalition of 62 of the 86 Permittees covered by this Order), the Los Angeles County Flood Control District and the County of Los Angeles, the City of Los Angeles, and interested environmental organizations including Heal the Bay, Santa Monica Baykeeper, and the Natural Resources Defense Council (NRDC). Staff also met on several occasions with other affected agencies including large public water suppliers (Los Angeles Department of Water and Power and Metropolitan Water District), small community water suppliers, and local fire departments.

Finally, staff hosted several “joint” meetings to bring together key leaders among the Permittees and environmental organizations to discuss significant issues and work towards consensus on these issues where possible. The first two of these were held on May 17, 2012 and May 31, 2012, during which the group discussed permit requirements for USEPA established TMDLs. Staff prepared a working proposal based on the areas of agreement from the May 17th joint meeting, and distributed the proposal for review prior to the second meeting on May 31st. The proposal was discussed and refined at the second meeting. A third meeting was held on June 14, 2012.

Prior to the Board’s consideration of this Order, the Regional Water Board notified the Permittees and all interested agencies and persons of its intent to hold a hearing to issue an NPDES permit for discharges from the Los Angeles County MS4 and provided them

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with an opportunity to submit written comments over a 45-day period. The procedures followed for submission of written comments are described in the Notice of Hearing and Opportunity to Comment published for this Order. Notification was provided through the Regional Water Board’s website, the Regional Water Board’s e-mail subscription service, and the LA Times. After releasing the tentative permit for public review, the Regional Water Board held a staff level workshop on July 9, 2012 to answer questions regarding the tentative permit. A Board member field tour of portions of the MS4 in the San Gabriel Valley was held on July 31, 2012.

The Regional Water Board held a public hearing on the tentative Order during its regular Board meeting on October 4-5, 2012. The Regional Water Board continued the public hearing at its next regular Board meeting on November 8, 2012. Permittees and interested persons were invited to attend. At the public hearing, the Regional Water Board heard testimony and comments pertinent to the discharge and this Order. The hearing procedures followed by the Regional Water Board are described in the Notice of Hearing and Opportunity to Comment published for this Order.

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ATTACHMENT G. NON-STORM WATER ACTION LEVELS AND MUNICIPAL ACTION LEVELS

I. SANTA CLARA RIVER WATERSHED AREA

Table G-1. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or less than 1 ppt)

Parameter	Units	Average Monthly	Daily Maximum
<i>E. coli</i> Bacteria	#/100 ml	126 ¹	235 ²
Chloride	mg/L	³	--
Sulfate	mg/L	³	--
Total Dissolved Solids	mg/L	³	--
Methylene Blue Active Substances	mg/L	0.5 ⁴	--
Aluminum, Total Recoverable	mg/L	1.0 ⁴	--
Cyanide, Total Recoverable	µg/L	4.3	8.5
Copper, Total Recoverable	µg/L	⁵	⁵
Mercury, Total Recoverable	µg/L	0.051	0.1
Selenium, Total Recoverable	µg/L	4.1	8.2

¹ *E. coli* density shall not exceed a geometric mean of 126/100 ml.

² *E. coli* density in a single sample shall not exceed 235/100 ml.

³ In accordance with applicable water quality objectives contained in Chapter 3 of the Basin Plan.

⁴ Applicable only to discharges to receiving waters designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.

⁵ Action levels are hardness dependent. See Section VII of this Attachment for a listing of the applicable action levels.

Table G-2. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity between 1 ppt and 10 ppt)

Parameter	Units	Average Monthly	Daily Maximum
<i>E. coli</i> Bacteria	#/100 ml	126 ¹	235 ²
Total Coliform Bacteria	#/100 ml	1,000 ³	10,000 ⁴
Fecal Coliform Bacteria	#/100 ml	200 ³	400 ⁴
Enterococcus Bacteria	#/100 ml	35 ³	104 ⁴
Chloride	mg/L	⁵	--
Sulfate	mg/L	⁵	--
Total Dissolved Solids	mg/L	⁵	--
Methylene Blue Active Substances	mg/L	0.5 ⁶	--
Aluminum, Total Recoverable	mg/L	1.0 ⁶	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	⁷	⁷
Mercury, Total Recoverable	µg/L	0.051	0.1
Selenium, Total Recoverable	µg/L	4.1	8.2

¹ *E. coli* density shall not exceed a geometric mean of 126/100 ml.

² *E. coli* density in a single sample shall not exceed 235/100 ml.

³ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.

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- ⁴ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁵ In accordance with applicable water quality objectives contained in Chapter 3 of the Basin Plan.
- ⁶ Applicable only to discharges to receiving waters designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.
- ⁷ The applicable action level is the most stringent between corresponding Table G-1 and Table G-3 action levels.

Table G-3. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or greater than 10 ppt 95% or more of the time)

Parameter	Units	Average Monthly	Daily Maximum
Total Coliform Bacteria	#/100 ml	1,000 ^{1,2}	10,000 ^{2,3}
Fecal Coliform Bacteria	#/100 ml	200 ¹	400 ³
Enterococcus Bacteria	#/100 ml	35 ¹	104 ³
Chloride	mg/L	4	--
Sulfate	mg/L	4	--
Total Dissolved Solids	mg/L	4	--
Methylene Blue Active Substances	mg/L	0.5 ⁵	--
Aluminum, Total Recoverable	mg/L	1.0 ⁵	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	2.9	5.8
Mercury, Total Recoverable	µg/L	0.051	0.1
Selenium, Total Recoverable	µg/L	58	117

- ¹ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ² In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ³ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁴ In accordance with applicable water quality objectives contained in Chapter 3 of the Basin Plan.
- ⁵ Applicable only to discharges to receiving waters designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.

Table G-4. Action Levels for Discharges to Ocean Waters (Surf Zone)

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Total Coliform Bacteria	#/100 ml	70 ¹	230 ¹	--
Fecal Coliform Bacteria	#/100 ml	--	200 ²	400 ³
Enterococcus Bacteria	#/100 ml	--	35 ²	104 ³
Cyanide, Total Recoverable	µg/L	1	4	10
Copper, Total Recoverable	µg/L	3	12	30
Mercury, Total Recoverable	µg/L	0.04	0.16	0.4
Selenium, Total Recoverable	µg/L	15	60	150

- ¹ In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.

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- ² Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ³ Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

II. LOS ANGELES RIVER WATERSHED MANAGEMENT AREA

Table G-5. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or less than 1 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
<i>E. coli</i> Bacteria	#/100 ml	126 ²	235 ³
Chloride	mg/L	⁴	--
Nitrite Nitrogen, Total (as N)	mg/L	1.0 ⁵	--
Sulfate	mg/L	⁴	--
Total Dissolved Solids	mg/L	⁴	--
Turbidity	NTU	5 ⁵	--
Aluminum, Total Recoverable	mg/L	1.0 ⁵	--
Cyanide, Total Recoverable	µg/L	4.3	8.5
Copper, Total Recoverable	µg/L	⁶	⁶
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² *E. coli* density shall not exceed a geometric mean of 126/100 ml.
- ³ *E. coli* density in a single sample shall not exceed 235/100 ml.
- ⁴ In accordance with applicable water quality objectives contained in Chapter 3 of the Basin Plan.
- ⁵ Applicable only to discharges to receiving waters or receiving waters with underlying groundwater designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.
- ⁶ Action levels are hardness dependent. See Section VII of this Attachment for a listing of the applicable action levels.

Table G-6. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity between 1 ppt and 10 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
<i>E. coli</i> Bacteria	#/100 ml	126 ²	235 ³
Total Coliform Bacteria	#/100 ml	1,000 ⁴	10,000 ⁵
Fecal Coliform Bacteria	#/100 ml	200 ⁴	400 ⁵
Enterococcus Bacteria	#/100 ml	35 ⁴	104 ⁵
Chloride	mg/L	⁶	--
Nitrite Nitrogen, Total (as N)	mg/L	1.0 ⁷	--
Sulfate	mg/L	⁶	--
Total Dissolved Solids	mg/L	⁶	--
Turbidity	NTU	5 ⁷	--
Aluminum, Total Recoverable	mg/L	1.0 ⁷	--
Cyanide, Total Recoverable	µg/L	0.50	1.0

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Parameter	Units	Average Monthly	Daily Maximum
Copper, Total Recoverable	µg/L	8	8
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² *E. coli* density shall not exceed a geometric mean of 126/100 ml.
- ³ *E. coli* density in a single sample shall not exceed 235/100 ml.
- ⁴ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ⁵ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁶ In accordance with applicable water quality objectives contained in Chapter 3 of the Basin Plan.
- ⁷ Applicable only to discharges to receiving waters or receiving waters with underlying groundwater designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.
- ⁸ The applicable action level is the most stringent between corresponding Table G-5 and Table G-7 action levels.

Table G-7. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or greater than 10 ppt 95% or more of the time)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
Total Coliform Bacteria	#/100 ml	1,000 ^{2, 3}	10,000 ^{3, 4}
Fecal Coliform Bacteria	#/100 ml	200 ²	400 ⁴
Enterococcus Bacteria	#/100 ml	35 ²	104 ⁴
Chloride	mg/L	5	--
Nitrite Nitrogen, Total (as N)	mg/L	1.0 ⁶	--
Sulfate	mg/L	5	--
Total Dissolved Solids	mg/L	5	--
Turbidity	NTU	5 ⁶	--
Aluminum, Total Recoverable	mg/L	1.0 ⁶	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	2.9	5.8
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	58	117

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ³ In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ⁴ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁵ In accordance with applicable water quality objectives contained in Chapter 3 of the Basin Plan.
- ⁶ Applicable only to discharges to receiving waters or receiving waters with underlying groundwater designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.

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Table G-8. Action Levels for Discharges to Ocean Waters (Surf Zone)

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
pH	Standard units	6.0-9.0 ¹		
Total Coliform Bacteria	#/100 ml	70 ²	230 ²	--
Fecal Coliform Bacteria	#/100 ml	--	200 ³	400 ⁴
Enterococcus Bacteria	#/100 ml	--	35 ³	104 ⁴
Turbidity	NTU	75	100	225
Cyanide, Total Recoverable	µg/L	1	4	10
Copper, Total Recoverable	µg/L	3	12	30
Mercury, Total Recoverable	µg/L	0.04	0.16	0.4
Selenium, Total Recoverable	µg/L	15	60	150

¹ Within the range of 6.0 to 9.0 at all times.

² In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.

³ Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.

⁴ Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

III. DOMINGUEZ CHANNEL WATERSHED MANAGEMENT AREA

Table G-9. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or less than 1 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
<i>E. coli</i> Bacteria	#/100 ml	126 ²	235 ³
Cyanide, Total Recoverable	µg/L	4.3	8.5
Copper, Total Recoverable	µg/L	4	4
Lead, Total Recoverable	µg/L	4	4
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

¹ Within the range of 6.5 to 8.5 at all times.

² *E. coli* density shall not exceed a geometric mean of 126/100 ml.

³ *E. coli* density in a single sample shall not exceed 235/100 ml.

⁴ Action levels are hardness dependent. See Section VII of this Attachment for a listing of the applicable action levels.

Table G-10. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity between 1 ppt and 10 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	s.u	6.5-8.5 ¹	
<i>E. coli</i> Bacteria	#/100 ml	126 ²	235 ³

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Parameter	Units	Average Monthly	Daily Maximum
Total Coliform Bacteria	#/100 ml	1,000 ⁴	10,000 ⁵
Fecal Coliform Bacteria	#/100 ml	200 ⁴	400 ⁵
Enterococcus Bacteria	#/100 ml	35 ⁴	104 ⁵
Cyanide, Total Recoverable	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	⁶	⁶
Lead, Total Recoverable	µg/L	⁶	⁶
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² *E. coli* density shall not exceed a geometric mean of 126/100 ml.
- ³ *E. coli* density in a single sample shall not exceed 235/100 ml.
- ⁴ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ⁵ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁶ The applicable action level is the most stringent between corresponding Table G-9 and Table G-11 action levels.

Table G-11. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or greater than 10 ppt 95% or more of the time)

Parameter	Units	Average Monthly	Daily Maximum
pH	s.u	6.5-8.5 ¹	
Total Coliform Bacteria	#/100 ml	1,000 ^{2,3}	10,000 ^{3,4}
Fecal Coliform Bacteria	#/100 ml	200 ²	400 ⁴
Enterococcus Bacteria	#/100 ml	35 ²	104 ⁴
Cyanide, Total Recoverable	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	2.9	5.8
Lead, Total Recoverable	µg/L	7.0	14
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	58	117

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ³ In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ⁴ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

Table G-12. Action Levels for Discharges to Ocean Waters (Surf Zone)

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
pH	s.u	6.0-9.0 ¹		
Total Coliform Bacteria	#/100 ml	70 ²	230 ²	--
Fecal Coliform Bacteria	#/100 ml	--	200 ³	400 ⁴
Enterococcus Bacteria	#/100 ml	--	35 ³	104 ⁴
Cyanide, Total Recoverable	µg/L	1	4	10
Copper, Total	µg/L	3	12	30

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Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Recoverable				
Lead, Total Recoverable	µg/L	2	8	20
Mercury, Total Recoverable	µg/L	0.04	0.16	0.4
Selenium, Total Recoverable	µg/L	15	60	150

- ¹ Within the range of 6.0 to 9.0 at all times.
- ² In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ³ Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ⁴ Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

IV. BALLONA CREEK WATERSHED MANAGEMENT AREA

Table G-13. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or less than 1 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
<i>E. coli</i> Bacteria	#/100 ml	126 ²	235 ³
Cyanide, Total Recoverable	µg/L	4.3	8.5
Copper, Total Recoverable	µg/L	4	4
Lead, Total Recoverable	µg/L	4	4
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² *E. coli* density shall not exceed a geometric mean of 126/100 ml.
- ³ *E. coli* density in a single sample shall not exceed 235/100 ml.
- ⁴ Action levels are hardness dependent. See Section VII of this Attachment for a listing of the applicable action levels.

Table G-14. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity between 1 ppt and 10 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
<i>E. coli</i> Bacteria	#/100 ml	126 ²	235 ³
Total Coliform Bacteria	#/100 ml	1,000 ⁴	10,000 ⁵
Fecal Coliform Bacteria	#/100 ml	200 ⁴	400 ⁵
Enterococcus Bacteria	#/100 ml	35 ⁴	104 ⁵
Cyanide	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	6	6
Lead, Total Recoverable	µg/L	6	6
Mercury, Total Recoverable	µg/L	0.051	0.1
Selenium, Total Recoverable	µg/L	4.1	8.2

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- ¹ Within the range of 6.5 to 8.5 at all times.
- ² *E. coli* density shall not exceed a geometric mean of 126/100 ml.
- ³ *E. coli* density in a single sample shall not exceed 235/100 ml.
- ⁴ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ⁵ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁶ The applicable action level is the most stringent between corresponding Table G-13 and Table G-15 action levels.

Table G-15. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or greater than 10 ppt 95% or more of the time)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
Total Coliform Bacteria	#/100 ml	1,000 ^{2, 3}	10,000 ^{3, 4}
Fecal Coliform Bacteria	#/100 ml	200 ²	400 ⁴
Enterococcus Bacteria	#/100 ml	35 ²	104 ⁴
Cyanide, Total Recoverable	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	2.9	5.8
Lead, Total Recoverable	µg/L	7.0	14
Mercury, Total Recoverable	µg/L	0.051	0.1
Selenium, Total Recoverable	µg/L	58	117

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ³ In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ⁴ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

Table G-16. Action Levels for Discharges to Ocean Waters (Surf Zone)

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
pH	Standard units	6.0-9.0 ¹		
Total Coliform Bacteria	#/100 ml	70 ²	230 ²	--
Fecal Coliform Bacteria	#/100 ml	--	200 ³	400 ⁴
Enterococcus Bacteria	#/100 ml	--	35 ³	104 ⁴
Cyanide, Total Recoverable	µg/L	1	4	10
Copper, Total Recoverable	µg/L	3	12	30
Lead, Total Recoverable	µg/L	2	8	20
Mercury, Total Recoverable	µg/L	0.04	0.16	0.4
Selenium, Total Recoverable	µg/L	15	60	150

- ¹ Within the range of 6.0 to 9.0 at all times.

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- ² In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ³ Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ⁴ Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

V. MALIBU CREEK WATERSHED MANAGEMENT AREA NON-STORM WATER ACTION LEVELS

Table G-17. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or less than 1 ppt)

Parameter	Units	Average Monthly	Daily Maximum
<i>E. coli</i> Bacteria	#/100 ml	126 ¹	235 ²
Sulfate	mg/L	³	--
Total Dissolved Solids	mg/L	³	--
Cyanide, Total Recoverable	µg/L	4.3	8.5
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

- ¹ *E. coli* density shall not exceed a geometric mean of 126/100 ml.
- ² *E. coli* density in a single sample shall not exceed 235/100 ml.
- ³ In accordance with applicable water quality objectives contained in Chapter 3 of the Basin Plan.

Table G-18. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity between 1 ppt and 10 ppt)

Parameter	Units	Average Monthly	Daily Maximum
<i>E. coli</i> Bacteria	#/100 ml	126 ¹	235 ²
Total Coliform Bacteria	#/100 ml	1,000 ³	10,000 ⁴
Fecal Coliform Bacteria	#/100 ml	200 ³	400 ⁴
Enterococcus Bacteria	#/100 ml	35 ³	104 ⁴
Sulfate	mg/L	⁵	--
Total Dissolved Solids	mg/L	⁵	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

- ¹ *E. coli* density shall not exceed a geometric mean of 126/100 ml.
- ² *E. coli* density in a single sample shall not exceed 235/100 ml.
- ³ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ⁴ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁵ In accordance with applicable water quality objectives contained in Chapter 3 of the Basin Plan.

Table G-19. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or greater than 10 ppt 95% or more of the time)

Parameter	Units	Average Monthly	Daily Maximum
Total Coliform Bacteria	#/100 ml	1,000 ^{1,2}	10,000 ^{2,3}

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Parameter	Units	Average Monthly	Daily Maximum
Fecal Coliform Bacteria	#/100 ml	200 ¹	400 ³
Enterococcus Bacteria	#/100 ml	35 ¹	104 ³
Sulfate	mg/L	4	--
Total Dissolved Solids	mg/L	4	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	58	117

- ¹ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ² In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ³ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁴ In accordance with applicable water quality objectives contained in Chapter 3 of the Basin Plan.

Table G-20. Action Levels for Discharges to Ocean Waters (Surf Zone)

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Total Coliform Bacteria	#/100 ml	70 ¹	230 ¹	--
Fecal Coliform Bacteria	#/100 ml	--	200 ²	400 ³
Enterococcus Bacteria	#/100 ml	--	35 ²	104 ³
Cyanide, Total Recoverable	µg/L	1	4	10
Mercury, Total Recoverable	µg/L	0.04	0.16	0.4
Selenium, Total Recoverable	µg/L	15	60	150

- ¹ In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ² Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ³ Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

VI. SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA

Table G-21. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or less than 1 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.0-9.0 ¹	
<i>E. coli</i> Bacteria	#/100 ml	126 ²	235 ³
Chloride	mg/L	4	--
Nitrate Nitrogen, Total (as N)	mg/L	4	--
Sulfate	mg/L	4	--
Total Dissolved Solids	mg/L	4	--

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Parameter	Units	Average Monthly	Daily Maximum
Aluminum, Total Recoverable	mg/L	1.0 ⁵	--
Cyanide, Total Recoverable	µg/L	4.3	8.5
Cadmium, Total Recoverable	µg/L	6	6
Copper, Total Recoverable	µg/L	6	6
Lead, Total Recoverable	µg/L	6	6
Mercury, Total Recoverable	µg/L	0.051	0.10
Nickel, Total Recoverable	µg/L	6	6
Selenium, Total Recoverable	µg/L	4.1	8.2
Silver, Total Recoverable	µg/L	6	6
Zinc, Total Recoverable	µg/L	6	6

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² *E. coli* density shall not exceed a geometric mean of 126/100 ml.
- ³ *E. coli* density in a single sample shall not exceed 235/100 ml.
- ⁴ In accordance with applicable water quality objectives contained in Chapter 3 of the Basin Plan.
- ⁵ Applicable only to discharges to receiving waters or receiving waters with underlying groundwater designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.
- ⁶ Action levels are hardness dependent. See Section VII of this Attachment for a listing of the applicable action levels.

Table G-22. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity between 1 ppt and 10 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.0-9.0 ¹	
<i>E. coli</i> Bacteria	#/100 ml	126 ²	235 ³
Total Coliform Bacteria	#/100 ml	1,000 ⁴	10,000 ⁵
Fecal Coliform Bacteria	#/100 ml	200 ⁴	400 ⁵
Enterococcus Bacteria	#/100 ml	35 ⁴	104 ⁵
Chloride	mg/L	6	--
Nitrate Nitrogen, Total (as N)	mg/L	6	--
Sulfate	mg/L	6	--
Total Dissolved Solids	mg/L	6	--
Aluminum, Total Recoverable	mg/L	1.0 ⁷	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Cadmium, Total Recoverable	µg/L	8	8
Copper, Total Recoverable	µg/L	8	8
Lead, Total Recoverable	µg/L	8	8
Mercury, Total Recoverable	µg/L	0.051	0.10
Nickel, Total Recoverable	µg/L	8	8
Selenium, Total Recoverable	µg/L	4.1	8.2
Silver, Total Recoverable	µg/L	8	8
Zinc, Total Recoverable	µg/L	8	8

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² *E. coli* density shall not exceed a geometric mean of 126/100 ml.
- ³ *E. coli* density in a single sample shall not exceed 235/100 ml.
- ⁴ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.

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- ⁵ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁶ In accordance with applicable water quality objectives contained in Chapter 3 of the Basin Plan.
- ⁷ Applicable only to discharges to receiving waters designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.
- ⁸ The applicable action level is the most stringent between corresponding Table G-21 and Table G-23 action levels.

Table G-23. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or greater than 10 ppt 95% or more of the time)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.0-9.0 ¹	
Total Coliform Bacteria	#/100 ml	1,000 ^{2,3}	10,000 ^{2,4}
Fecal Coliform Bacteria	#/100 ml	200 ²	400 ⁴
Enterococcus Bacteria	#/100 ml	35 ²	104 ⁴
Chloride	mg/L	5	--
Nitrate Nitrogen, Total (as N)	mg/L	5	--
Sulfate	mg/L	5	--
Total Dissolved Solids	mg/L	5	--
Aluminum, Total Recoverable	mg/L	1.0 ⁶	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Cadmium, Total Recoverable	µg/L	7.7	15
Copper, Total Recoverable	µg/L	2.9	5.8
Lead, Total Recoverable	µg/L	7.0	14
Mercury, Total Recoverable	µg/L	0.051	0.10
Nickel, Total Recoverable	µg/L	6.8	14
Silver, Total Recoverable	µg/L	1.1	2.2
Selenium, Total Recoverable	µg/L	58	117
Zinc, Total Recoverable	µg/L	47	95

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ³ In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ⁴ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁵ In accordance with applicable water quality objectives contained in Chapter 3 of the Basin Plan.
- ⁶ Applicable only to discharges to receiving waters designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.

Table G-24. Action Levels for Discharges to Ocean Waters (Surf Zone)

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
pH	Standard units	6.0-9.0 ¹		
Total Coliform Bacteria	#/100 ml	70 ²	230 ²	--
Fecal Coliform Bacteria	#/100 ml	--	200 ³	400 ⁴
Enterococcus	#/100 ml	--	35 ³	104 ⁴

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Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Cyanide, Total Recoverable	µg/L	1	4	10
Cadmium, Total Recoverable	µg/L	1	4	10
Copper, Total Recoverable	µg/L	3	12	30
Lead, Total Recoverable	µg/L	2	8	20
Mercury, Total Recoverable	µg/L	0.04	0.16	0.4
Nickel, Total Recoverable	µg/L	5	20	50
Silver, Total Recoverable	µg/L	0.7	2.8	7.0
Selenium, Total Recoverable	µg/L	15	60	150
Zinc, Total Recoverable	µg/L	20	80	200

- ¹ Within the range of 6.0 to 9.0 at all times.
- ² In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ³ Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ⁴ Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

VII. HARDNESS-BASED ACTION LEVELS FOR METALS

Cadmium, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
5.0	0.1	0.2	125.0	2.4	4.8	245.0	4.1	8.2
10.0	0.2	0.3	130.0	2.5	5.0	250.0	4.1	8.3
15.0	0.3	0.5	135.0	2.5	5.1	255.0	4.2	8.4
20.0	0.4	0.7	140.0	2.6	5.3	260.0	4.3	8.5
25.0	0.5	0.9	145.0	2.7	5.4	265.0	4.3	8.7
30.0	0.6	1.2	150.0	2.8	5.5	270.0	4.4	8.8
35.0	0.7	1.4	155.0	2.8	5.7	275.0	4.5	8.9
40.0	0.8	1.6	160.0	2.9	5.8	280.0	4.5	9.1
45.0	0.9	1.8	165.0	3.0	6.0	285.0	4.6	9.2
50.0	1.0	2.1	170.0	3.1	6.1	290.0	4.6	9.3
55.0	1.1	2.3	175.0	3.1	6.3	295.0	4.7	9.4
60.0	1.3	2.5	180.0	3.2	6.4	300.0	4.8	9.6
65.0	1.4	2.8	185.0	3.3	6.5	310.0	4.9	9.8
70.0	1.5	3.0	190.0	3.3	6.7	320.0	5.0	10.1
75.0	1.6	3.2	195.0	3.4	6.8	330.0	5.1	10.3
80.0	1.7	3.4	200.0	3.5	7.0	340.0	5.3	10.5
85.0	1.8	3.6	205.0	3.5	7.1	350.0	5.4	10.8

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Cadmium, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
90.0	1.9	3.7	210.0	3.6	7.2	360.0	5.5	11.0
95.0	1.9	3.9	215.0	3.7	7.4	370.0	5.6	11.3
100.0	2.0	4.0	220.0	3.7	7.5	380.0	5.7	11.5
105.0	2.1	4.2	225.0	3.8	7.6	390.0	5.9	11.7
110.0	2.2	4.3	230.0	3.9	7.8	400.0	6.0	12.0
115.0	2.2	4.5	235.0	3.9	7.9	>400	6.0	12.0
120.0	2.3	4.7	240.0	4.0	8.0			

Copper, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
5.0	0.4	0.8	125.0	8.6	17.2	245.0	16.2	32.5
10.0	0.8	1.6	130.0	8.9	17.9	250.0	16.5	33.1
15.0	1.2	2.3	135.0	9.2	18.5	255.0	16.8	33.8
20.0	1.5	3.1	140.0	9.6	19.2	260.0	17.1	34.4
25.0	1.9	3.8	145.0	9.9	19.8	265.0	17.4	35.0
30.0	2.2	4.5	150.0	10.2	20.5	270.0	17.8	35.6
35.0	2.6	5.2	155.0	10.5	21.1	275.0	18.1	36.2
40.0	2.9	5.9	160.0	10.8	21.8	280.0	18.4	36.9
45.0	3.3	6.6	165.0	11.2	22.4	285.0	18.6	37.4
50.0	3.6	7.3	170.0	11.5	23.0	290.0	18.9	38.0
55.0	4.0	8.0	175.0	11.8	23.7	295.0	19.2	38.5
60.0	4.3	8.6	180.0	12.1	24.3	300.0	19.5	39.1
65.0	4.6	9.3	185.0	12.4	25.0	310.0	20.0	40.2
70.0	5.0	10.0	190.0	12.8	25.6	320.0	20.6	41.3
75.0	5.3	10.7	195.0	13.1	26.2	330.0	21.1	42.4
80.0	5.6	11.3	200.0	13.4	26.9	340.0	21.7	43.5
85.0	6.0	12.0	205.0	13.7	27.5	350.0	22.2	44.6
90.0	6.3	12.7	210.0	14.0	28.1	360.0	22.8	45.7
95.0	6.6	13.3	215.0	14.3	28.7	370.0	23.3	46.8
100.0	7.0	14.0	220.0	14.6	29.4	380.0	23.8	47.8
105.0	7.3	14.6	225.0	15.0	30.0	390.0	24.4	48.9
110.0	7.6	15.3	230.0	15.3	30.6	400.0	24.9	50.0
115.0	7.9	15.9	235.0	15.6	31.3	>400	24.9	50.0
120.0	8.3	16.6	240.0	15.9	31.9			

Lead, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
5.0	0.1	0.1	125.0	3.5	6.9	245.0	8.1	16.3
10.0	0.1	0.3	130.0	3.6	7.3	250.0	8.3	16.7

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Lead, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
15.0	0.2	0.5	135.0	3.8	7.6	255.0	8.6	17.2
20.0	0.3	0.7	140.0	4.0	8.0	260.0	8.8	17.6
25.0	0.4	0.9	145.0	4.2	8.4	265.0	9.0	18.0
30.0	0.6	1.1	150.0	4.4	8.7	270.0	9.2	18.5
35.0	0.7	1.4	155.0	4.5	9.1	275.0	9.4	18.9
40.0	0.8	1.6	160.0	4.7	9.5	280.0	9.6	19.3
45.0	0.9	1.9	165.0	4.9	9.9	285.0	9.9	19.8
50.0	1.1	2.2	170.0	5.1	10.2	290.0	10.1	20.2
55.0	1.2	2.4	175.0	5.3	10.6	295.0	10.3	20.7
60.0	1.4	2.7	180.0	5.5	11.0	300.0	10.5	21.1
65.0	1.5	3.0	185.0	5.7	11.4	310.0	11.0	22.0
70.0	1.7	3.3	190.0	5.9	11.8	320.0	11.4	22.9
75.0	1.8	3.6	195.0	6.1	12.2	330.0	11.9	23.8
80.0	2.0	3.9	200.0	6.3	12.6	340.0	12.3	24.8
85.0	2.1	4.2	205.0	6.5	13.0	350.0	12.8	25.7
90.0	2.3	4.6	210.0	6.7	13.4	360.0	13.3	26.6
95.0	2.4	4.9	215.0	6.9	13.8	370.0	13.7	27.6
100.0	2.6	5.2	220.0	7.1	14.2	380.0	14.2	28.5
105.0	2.8	5.5	225.0	7.3	14.6	390.0	14.7	29.5
110.0	2.9	5.9	230.0	7.5	15.1	400.0	15.2	30.5
115.0	3.1	6.2	235.0	7.7	15.5	>400	15.2	30.5
120.0	3.3	6.6	240.0	7.9	15.9			

Nickel, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
5.0	3.4	6.8	125.0	51.5	103.3	245.0	90.9	182.5
10.0	6.1	12.2	130.0	53.2	106.7	250.0	92.5	185.6
15.0	8.6	17.2	135.0	54.9	110.2	255.0	94.1	188.7
20.0	10.9	21.9	140.0	56.6	113.6	260.0	95.6	191.9
25.0	13.2	26.5	145.0	58.3	117.1	265.0	97.2	195.0
30.0	15.4	30.9	150.0	60.0	120.5	270.0	98.7	198.1
35.0	17.5	35.2	155.0	61.7	123.9	275.0	100.3	201.2
40.0	19.6	39.4	160.0	63.4	127.2	280.0	101.8	204.3
45.0	21.7	43.5	165.0	65.1	130.6	285.0	103.3	207.4
50.0	23.7	47.6	170.0	66.8	133.9	290.0	104.9	210.4
55.0	25.7	51.6	175.0	68.4	137.3	295.0	106.4	213.5
60.0	27.7	55.5	180.0	70.1	140.6	300.0	107.9	216.6
65.0	29.6	59.4	185.0	71.7	143.9	310.0	111.0	222.7
70.0	31.5	63.2	190.0	73.3	147.1	320.0	114.0	228.7
75.0	33.4	67.0	195.0	75.0	150.4	330.0	117.0	234.7
80.0	35.3	70.8	200.0	76.6	153.7	340.0	120.0	240.7

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Nickel, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
85.0	37.1	74.5	205.0	78.2	156.9	350.0	123.0	246.7
90.0	39.0	78.2	210.0	79.8	160.2	360.0	125.9	252.7
95.0	40.8	81.9	215.0	81.4	163.4	370.0	128.9	258.6
100.0	42.6	85.5	220.0	83.0	166.6	380.0	131.8	264.5
105.0	44.4	89.1	225.0	84.6	169.8	390.0	134.8	270.4
110.0	46.2	92.7	230.0	86.2	173.0	400.0	137.7	276.2
115.0	48.0	96.2	235.0	87.8	176.1	>400	137.7	276.2
120.0	49.7	99.8	240.0	89.4	179.3			

Zinc, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
5.0	4.7	9.4	125.0	72.0	144.5	245.0	127.4	255.6
10.0	8.5	17.0	130.0	74.5	149.4	250.0	129.6	260.0
15.0	11.9	24.0	135.0	76.9	154.2	255.0	131.8	264.4
20.0	15.2	30.6	140.0	79.3	159.1	260.0	134.0	268.8
25.0	18.4	37.0	145.0	81.7	163.9	265.0	136.1	273.1
30.0	21.5	43.1	150.0	84.1	168.6	270.0	138.3	277.5
35.0	24.5	49.1	155.0	86.4	173.4	275.0	140.5	281.9
40.0	27.4	55.0	160.0	88.8	178.1	280.0	142.6	286.2
45.0	30.3	60.8	165.0	91.1	182.8	285.0	144.8	290.5
50.0	33.1	66.5	170.0	93.5	187.5	290.0	146.9	294.8
55.0	35.9	72.1	175.0	95.8	192.2	295.0	149.1	299.1
60.0	38.7	77.6	180.0	98.1	196.8	300.0	151.2	303.4
65.0	41.4	83.0	185.0	100.4	201.4	310.0	155.5	312.0
70.0	44.1	88.4	190.0	102.7	206.0	320.0	159.7	320.5
75.0	46.7	93.7	195.0	105.0	210.6	330.0	163.9	328.9
80.0	49.3	99.0	200.0	107.3	215.2	340.0	168.1	337.4
85.0	51.9	104.2	205.0	109.5	219.8	350.0	172.3	345.8
90.0	54.5	109.4	210.0	111.8	224.3	360.0	176.5	354.1
95.0	57.1	114.5	215.0	114.0	228.8	370.0	180.6	362.4
100.0	59.6	119.6	220.0	116.3	233.3	380.0	184.8	370.7
105.0	62.1	124.7	225.0	118.5	237.8	390.0	188.9	379.0
110.0	64.6	129.7	230.0	120.7	242.3	400.0	193.0	387.2
115.0	67.1	134.7	235.0	123.0	246.7	>400	193.0	387.2
120.0	69.6	139.6	240.0	125.2	251.2			

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VIII. MUNICIPAL ACTION LEVELS

Conventional Pollutants

Pollutants	pH	TSS mg/L	COD mg/L	Kjedahl Nitrogen (TKN) mg/L	Nitrate & Nitrite-total mg/L	P- total mg/L
Municipal Action Level	6.0-9.0	264.1	247.5	4.59	1.85	0.80

Metals

Pollutants	Cd- total µg/L	Cr-total µg/L	Cu- total µg/L	Pb- total µg/L	Ni- total µg/L	Zn- total µg/L	Hg- total µg/L
Municipal Action Level	2.52	20.20	71.12	102.00	27.43	641.3	0.32

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This Order establishes Municipal Action Levels (MALs) to identify subwatersheds requiring additional Best Management Practices (BMPs) to reduce pollutant loads and prioritize implementation of additional BMPs. MALs for selected pollutants are based on nationwide Phase I MS4 monitoring data for pollutants in storm water (<http://unix.eng.ua.edu/~rpitt/Research/Research.shtml>, last visited on May 9, 2012). The MALs were obtained by computing the upper 25th percentile for selected pollutants using the statistical program Minitab. Non-detects were removed from the data set and all data from the database were used.

Under this Order, the Municipal Action Levels (MALs) shall be utilized by Permittees to identify subwatersheds discharging pollutants at levels in excess of the MALs. Within those subwatersheds where pollutant levels in the discharge are in excess of the MALs, Permittees shall implement controls and measures necessary to reduce the discharge of pollutants.

In order to determine if MS4 discharges are in excess of the MALs, Permittees shall conduct outfall monitoring as required in the Monitoring and Reporting Program (MRP) (Attachment E). A MAL Assessment Report shall be submitted to the Regional Water Board Executive Officer as part of the Annual Report. The MAL Assessment Report shall present the monitoring data in comparison to the applicable MALs, and identify those subwatersheds with a running average of twenty percent or greater of exceedances of the MALs listed in this attachment in discharges of storm water from the MS4.

Beginning in Year 3 after the effective date of this Order, each Permittee shall submit a MAL Action Plan with the Annual Report (first MAL Action Plan due with December 15, ~~2013~~ 2015 Annual Report) to the Regional Water Board Executive Officer, for those subwatersheds with a running average of twenty percent or greater of exceedances of the MALs in any discharge of

storm water from the MS4. The plan shall include an assessment of the sources responsible for the MAL exceedances, the existing storm water programs and BMPs that address those sources, an assessment of potential program enhancements, alternative BMPs and actions the Permittee shall implement to reduce discharges to a level that is equivalent to or below the MALs, and an implementation schedule for such actions for Executive Officer approval. The MAL Action Plan shall provide the technical rationale to demonstrate the proposed measures and controls will attain the MALs. If the MAL Action Plan is not approved within 90 days of the due date, the Executive Officer may establish an appropriate plan with at least 90 day notification and consultation to the Permittees.

Within 90 days of the plan approval by the Regional Water Board Executive Officer, the Permittee shall initiate the BMPs and actions proposed in the MAL Action Plan, together with any other practicable BMPs or actions that the Executive Officer determines to be necessary to meet the MALs. The Permittee shall complete the proposed actions in accordance with the approved implementation schedule.

Upon completion of the actions specified in the approved MAL Action Plan, the Permittee shall re-monitor the subject subwatershed in accordance with the MRP, and submit a Post-Project MAL Assessment Report to the Regional Water Board Executive Officer.

Implementation of an approved Watershed Management Program per Part VI.C of the Order fulfills all requirements related to the development and implementation of the MAL Action Plan.

As additional data become available through the MRP or from the Regional Subset of the National Dataset, MALs may be revised annually by the Regional Water Board Executive Officer in accordance with an equivalent statistical method as that used to establish the MALs in this attachment with at least 90 day notification and consultation to the Permittees.

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ATTACHMENT K. PERMITTEES AND TMDLS MATRIX

Note: For all tables in this Attachment, Permittees listed in *italics* are Multi-Jurisdictional Permittees.

Table K-1: Santa Clara River Watershed Management Area TMDLs

SANTA CLARA RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS			
	Santa Clara River Nitrogen Compounds TMDL	Upper Santa Clara River Chloride TMDL	Lake Elizabeth, Munz Lake, and Lake Hughes Trash TMDL	Santa Clara River Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL
<i>Los Angeles (County of)</i>	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X
<i>Santa Clarita</i>	X	X		X

Table K-2: Santa Monica Bay Watershed Management Area TMDLs

SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS					
				Malibu Creek Subwatershed		
	Santa Monica Bay Beaches Bacteria TMDL (Wet and Dry Weather)	Santa Monica Bay Nearshore and Offshore Debris TMDL	Santa Monica Bay TMDL for DDTs and PCBs	Malibu Creek and Lagoon Bacteria TMDL	Malibu Creek Watershed Trash TMDL	Malibu Creek Nutrient TMDL
<i>Agoura Hills</i>	X	X	X	X	X	X
<i>Beverly Hills</i>	X	X	X			
<i>Calabasas</i>	X	X	X	X	X	X
<i>Culver City</i>	X	X	X			
<i>El Segundo</i>	X	X	X			
<i>Hermosa Beach</i>	X	X	X			
<i>Hidden Hills</i>	X	X	X	X	X	X
<i>Inglewood</i>	X	X	X			

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SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS					
				Malibu Creek Subwatershed		
	Santa Monica Bay Beaches Bacteria TMDL (Wet and Dry Weather)	Santa Monica Bay Nearshore and Offshore Debris TMDL	Santa Monica Bay TMDL for DDTs and PCBs	Malibu Creek and Lagoon Bacteria TMDL	Malibu Creek Watershed Trash TMDL	Malibu Creek Nutrient TMDL
<i>Los Angeles (City of)</i>	X	X	X			
<i>Los Angeles (County of)</i>	X	X	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X	X	X
Malibu	X	X	X	X	X	X
<i>Manhattan Beach</i>	X	X	X			
<i>Palos Verdes Estates</i>	X	X	X			
<i>Rancho Palos Verdes</i>	X	X	X			
<i>Redondo Beach</i>	X	X	X			
<i>Rolling Hills</i>	X	X	X			
<i>Rolling Hills Estates</i>	X	X	X			
Santa Monica	X	X	X			
Torrance	X	X	X			
West Hollywood	X	X	X			
Westlake Village	X	X	X	X	X	X

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Table K-3: Santa Monica Bay Watershed Management Area TMDLs

SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS						
	Ballona Creek Subwatershed					Marina del Rey Subwatershed	
	Ballona Creek Trash TMDL	Ballona Creek Estuary Toxic Pollutants TMDL	Ballona Creek, Ballona estuary and Sepulveda Channel Bacteria TMDL	Ballona Creek Metals TMDL	Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation	Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL	Marina del Rey Harbor Toxic Pollutants TMDL
Agoura Hills							
Beverly Hills	X	X	X	X	X		
Calabasas							
Culver City	X	X	X	X	X	X	X
<i>El Segundo</i>							
Hermosa Beach							
<i>Hidden Hills</i>							
<i>Inglewood</i>	X	X	X	X	X		
<i>Los Angeles (City of)</i>	X	X	X	X	X	X	X
<i>Los Angeles (County of)</i>	X	X	X	X	X	X	X
<i>Los Angeles County Flood Control</i>		X	X	X	X	X	X
Malibu							
<i>Manhattan Beach</i>							
<i>Palos Verdes Estates</i>							
<i>Rancho Palos Verdes</i>							
<i>Redondo Beach</i>							
<i>Rolling Hills</i>							
<i>Rolling Hills Estates</i>							

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SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS						
	Ballona Creek Subwatershed					Marina del Rey Subwatershed	
	Ballona Creek Trash TMDL	Ballona Creek Estuary Toxic Pollutants TMDL	Ballona Creek, Ballona estuary and Sepulveda Channel Bacteria TMDL	Ballona Creek Metals TMDL	Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation	Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL	Marina del Rey Harbor Toxic Pollutants TMDL
Santa Monica	X	X	X	X	X		
<i>Torrance</i>							
West Hollywood	X	X	X	X	X		
Westlake Village							

Table K-4: Dominguez Channel Watershed Management Area TMDLs

DOMINGUEZ CHANNEL WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS				
	Los Angeles Harbor Bacteria TMDL	Machado Lake Trash TMDL	Machado Lake Nutrient TMDL	Machado Lake Pesticides and PCBs TMDL	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Carson</i>		X	X	X	X
<i>Compton</i>					X
<i>El Segundo</i>					X
<i>Gardena</i>					X
<i>Hawthorne</i>					X
<i>Inglewood</i>					X
<i>Lawndale</i>					X
<i>Lomita</i>		X	X	X	
<i>Los Angeles (City of)</i>	X	X	X	X	X
<i>Los Angeles (County of)</i>	X	X	X	X	X
<i>Los Angeles County Flood Control</i>		X	X	X	X

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DOMINGUEZ CHANNEL WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS				
	Los Angeles Harbor Bacteria TMDL	Machado Lake Trash TMDL	Machado Lake Nutrient TMDL	Machado Lake Pesticides and PCBs TMDL	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Manhattan Beach</i>					X
<i>Palos Verdes Estates</i>		X	X	X	
<i>Rancho Palos Verdes</i>		X	X	X	X
<i>Redondo Beach</i>		X	X	X	X
<i>Rolling Hills</i>		X	X	X	X
<i>Rolling Hills Estates</i>		X	X	X	X
<i>Torrance</i>		X	X	X	X

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Table K-5: Los Angeles River Watershed Management Area TMDLs

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS							
	Los Angeles River Watershed Trash TMDL	Los Angeles River Nitrogen Compounds and Related Effects TMDL	Los Angeles River and Tributaries Metals TMDL	Los Angeles River Watershed Bacteria TMDL	Legg Lake Trash TMDL	Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL	Los Angeles Area Lake TMDLs for Lake Calabasas, Echo Park Lake, Legg Lake and Peck Road Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Alhambra</i>	X	X	X	X				
<i>Arcadia</i>	X	X	X	X			X	
<i>Bell</i>	X	X	X	X				
<i>Bell Gardens</i>	X	X	X	X				
<i>Bradbury</i>	X	X	X	X			X	
<i>Burbank</i>	X	X	X	X				
<i>Calabasas</i>	X	X	X	X			X	
<i>Carson</i>	X	X	X	X				X
<i>Commerce</i>	X	X	X	X				

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LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS							
	Los Angeles River Watershed Trash TMDL	Los Angeles River Nitrogen Compounds and Related Effects TMDL	Los Angeles River and Tributaries Metals TMDL	Los Angeles River Watershed Bacteria TMDL	Legg Lake Trash TMDL	Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL	Los Angeles Area Lake TMDLs for Lake Calabasas, Echo Park Lake, Legg Lake and Peck Road Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Compton</i>	X	X	X	X				X
<i>Cudahy</i>	X	X	X	X				
<i>Downey</i>	X	X	X	X				
<i>Duarte</i>	X	X	X	X			X	
<i>El Monte</i>	X	X	X	X	X		X	
<i>Glendale</i>	X	X	X	X				
<i>Hidden Hills</i>	X	X	X	X				
<i>Huntington Park</i>	X	X	X	X				
<i>Inglewood</i>	-	-	-	-		-	-	
<i>Irwindale</i>	X	X	X	X			X	
<i>La Canada Flintridge</i>	X	X	X	X				
<i>Lakewood</i>	X	X						X
<i>Los Angeles (City of)</i>	X	X	X	X			X	X
<i>Los Angeles (County of)</i>	X	X	X	X	X		X	X
<i>Los Angeles County Flood Control</i>		X	X	X	X	X	X	X
<i>Lynwood</i>	X	X	X	X				
<i>Maywood</i>	X	X	X	X				
<i>Monrovia</i>	X	X	X	X			X	
<i>Montebello</i>	X	X	X	X				
<i>Monterey Park</i>	X	X	X	X				
<i>Paramount</i>	X	X	X	X				X

REVISITED TENTATIVE

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS							
	Los Angeles River Watershed Trash TMDL	Los Angeles River Nitrogen Compounds and Related Effects TMDL	Los Angeles River and Tributaries Metals TMDL	Los Angeles River Watershed Bacteria TMDL	Legg Lake Trash TMDL	Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL	Los Angeles Area Lake TMDLs for Lake Calabasas, Echo Park Lake, Legg Lake and Peck Road Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
Pasadena	X	X	X	X				
<i>Pico Rivera</i>	X	X	X	X				
Rosemead	X	X	X	X				
San Fernando	X	X	X	X				
San Gabriel	X	X	X	X				
San Marino	X	X	X	X				
<i>Santa Clarita</i>	X	X	X	X				
Sierra Madre	X	X	X	X			X	
<i>Signal Hill</i>	X	X	X	X		X		X
<i>South El Monte</i>	X	X	X	X	X		X	
South Gate	X	X	X	X				
South Pasadena	X	X	X	X				
Temple City	X	X	X	X				
Vernon	X	X	X	X				

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Table K-6: San Gabriel River Watershed Management Area TMDLs

SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS		
	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL	Los Angeles Area Lakes TMDLs for Puddingstone Reservoir, and Santa Fe Dam Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Arcadia</i>	X		
<i>Artesia</i>	X		
<i>Azusa</i>	X	X	
<i>Baldwin Park</i>	X		
<i>Bellflower</i>	X		X
<i>Bradbury</i>	X		
<i>Cerritos</i>	X		
<i>Claremont</i>	X	X	
<i>Covina</i>	X		
<i>Diamond Bar</i>	X		
<i>Downey</i>	X		
<i>Duarte</i>	X		
<i>El Monte</i>	X		
<i>Glendora</i>	X		
<i>Hawaiian Gardens</i>	X		
<i>Industry</i>	X		
<i>Irwindale</i>	X	X	
<i>La Habra Heights</i>	X		
<i>La Mirada</i>	X		
<i>La Puente</i>	X		
<i>La Verne</i>	X	X	
<i>Lakewood</i>	X		X
<i>Los Angeles (County of)</i>	X	X	X

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SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS		
	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL	Los Angeles Area Lakes TMDLs for Puddingstone Reservoir, and Santa Fe Dam Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Los Angeles County Flood Control</i>	X	X	X
<i>Monrovia</i>	X		
<i>Norwalk</i>	X		
<i>Pico Rivera</i>	X		
<i>Pomona</i>	X	X	
<i>San Dimas</i>	X	X	
<i>Santa Fe Springs</i>	X		
<i>South El Monte</i>	X		
<i>Walnut</i>	X		
<i>West Covina</i>	X		
<i>Whittier</i>	X		

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Table K-7: Los Cerritos Channel and Alamitos Bay Watershed Management Area TMDLs

LOS CERRITOS CHANNEL AND ALAMITOS BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS		
	Los Cerritos Channel Metals TMDL	Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Bellflower</i>	X		X
<i>Cerritos</i>	X		
<i>Downey</i>	X		
<i>Lakewood</i>	X		X
<i>Los Angeles (County of)</i>	X		X
<i>Los Angeles County Flood Control</i>	X	X	X
<i>Paramount</i>	X		X
<i>Signal Hill</i>	X		X

Table K-8: Middle Santa Ana River Watershed Management Area TMDLs

MIDDLE SANTA ANA RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDL
	Middle Santa Ana River Watershed Bacterial Indicator TMDL
<i>Claremont</i>	X
<i>Pomona</i>	X

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Table K-9: Los Angeles River Watershed Management Area Metals TMDLs by Reach

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River and Tributaries Metals TMDL				
	Reach 1 and Compton Creek	Reach 2, Rio Hondo, Arroyo Seco, and all contributing subwatersheds	Reach 3, Verdugo Wash, and Burbank Western Channel	Reach 4, Reach 5, Tujunga Wash, and all contributing subwatersheds	Reach 6, Bell Creek, and all contributing subwatersheds
Alhambra		X			
Arcadia		X			
Bell		X			
Bell Gardens		X			
Bradbury		X			
Burbank			X	X	
Calabasas					X
Carson	X				
Commerce		X			
Compton	X	X			
Cudahy		X			
Downey		X			
Duarte		X			
El Monte		X			
Glendale		X	X	X	
Hidden Hills					X
Huntington Park	X	X			
Inglewood	-	-	-	-	-
Irwindale		X			
La Canada Flintridge		X	X		
Lakewood					
Los Angeles (City of)	X	X	X	X	X
Los Angeles (County of)	X	X	X	X	X
Los Angeles County Flood Control	X	X	X	X	X

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LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River and Tributaries Metals TMDL				
	Reach 1 and Compton Creek	Reach 2, Rio Hondo, Arroyo Seco, and all contributing subwatersheds	Reach 3, Verdugo Wash, and Burbank Western Channel	Reach 4, Reach 5, Tujunga Wash, and all contributing subwatersheds	Reach 6, Bell Creek, and all contributing subwatersheds
Lynwood	X	X			
Maywood		X			
Monrovia		X			
Montebello		X			
Monterey Park		X			
Paramount		X			
Pasadena		X	X		
Pico Rivera		X			
Rosemead		X			
San Fernando				X	
San Gabriel		X			
San Marino		X			
Santa Clarita					
Sierra Madre		X			
Signal Hill	X				
South El Monte		X			
South Gate	X	X			
South Pasadena		X			
Temple City		X			
Vernon		X			

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Table K-10: Los Angeles River Watershed Management Area Bacteria TMDL by Reach

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River Watershed Bacteria TMDL															
	Los Angeles River Segment					Los Angeles River Tributary										
	A	B	C	D	E	Aliso Canyon Wash	Arroyo Seco	Bell Creek	Bull Creek	Burbank Western Channel	Compton Creek	Dry Canyon Creek	McCoy Canyon Creek	Rio Hondo	Tujunga Wash	Verdugo Wash
Alhambra		X												X		
Arcadia														X		
Bell		X														
Bell Gardens		X												X		
Bradbury														X		
Burbank			X						X							
Calabasas											X	X				
Carson										X						
Commerce		X												X		
Compton	X	X								X						
Cudahy		X														
Downey		X												X		
Duarte														X		
El Monte														X		
Glendale		X	X				X		X						X	X
Hidden Hills								X				X				
Huntington Park		X								X						
Inglewood	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Irwindale														X		
La Canada Flintridge			X				X									X
Lakewood	X															
Los Angeles (City of)		X	X	X	X	X	X	X	X	X	X	X	X		X	X

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LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River Watershed Bacteria TMDL															
	Los Angeles River Segment					Los Angeles River Tributary										
	A	B	C	D	E	Aliso Canyon Wash	Arroyo Seco	Bell Creek	Bull Creek	Burbank Western Channel	Compton Creek	Dry Canyon Creek	McCoy Canyon Creek	Rio Hondo	Tujunga Wash	Verdugo Wash
<i>Los Angeles (County of)</i>	X	X	X		X	X	X	X	X		X	X	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Lynwood	X	X									X					
Maywood		X														
Monrovia														X		
Montebello		X												X		
Monterey Park		X												X		
Paramount	X	X														
Pasadena		X	X				X							X		X
Pico Rivera														X		
Rosemead														X		
San Fernando															X	
San Gabriel														X		
San Marino														X		
Santa Clarita									X							
Sierra Madre														X		
Signal Hill	X															
South El Monte														X		
South Gate		X									X			X		
South Pasadena		X					X							X		
Temple City														X		
Vernon		X														

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Table K-11: Santa Monica Bay Watershed Management Area Bacteria TMDL by Reach

SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	Santa Monica Bay Beaches Bacteria TMDL (Wet and Dry Weather)								
	Jurisdiction Group 1	Jurisdiction Group 2	Jurisdiction Group 3	Jurisdiction Group 4	Jurisdiction Group 5	Jurisdiction Group 6	Jurisdiction Group 7	Jurisdiction Group 8	Jurisdiction Group 9
Agoura Hills									X
Beverly Hills								X	
Calabasas	X								X
Culver City								X	
El Segundo		X			X				
Hermosa Beach					X	X			
Hidden Hills									X
Inglewood								X	
Los Angeles (City of)	X	X	X				X	X	
Los Angeles (County of)	X	X		X	X	X	X	X	X
Los Angeles County Flood Control	X	X	X	X	X	X	X	X	X
Malibu	X			X					X
Manhattan Beach					X	X			
Palos Verdes Estates							X		
Rancho Palos Verdes							X		
Redondo Beach						X			
Rolling Hills							X		
Rolling Hills Estates							X		
Santa Monica		X	X					X	
Torrance						X			

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SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	Santa Monica Bay Beaches Bacteria TMDL (Wet and Dry Weather)								
	Jurisdiction Group 1	Jurisdiction Group 2	Jurisdiction Group 3	Jurisdiction Group 4	Jurisdiction Group 5	Jurisdiction Group 6	Jurisdiction Group 7	Jurisdiction Group 8	Jurisdiction Group 9
West Hollywood								X	
Westlake Village									X

Table K-12: San Gabriel River Watershed Management Area Metals TMDLs by Reach

SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL							
	Walnut Creek	San Jose Creek	Coyote Creek	San Gabriel River Reach 1	San Gabriel River Reach 2	San Gabriel River Reach 3	San Gabriel River Reach 4	San Gabriel River Reach 5
<i>Arcadia</i>							X	
Artesia			X	X				
Azusa	X							X
Baldwin Park	X					X	X	
<i>Bellflower</i>				X				
Bradbury								
<i>Cerritos</i>			X	X				
Claremont	X	X						
Covina	X							
Diamond Bar		X	X					
<i>Downey</i>				X	X			
<i>Duarte</i>								X
<i>El Monte</i>						X	X	
Glendora	X							X
Hawaiian Gardens			X					
Industry	X	X			X	X		

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SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL							
	Walnut Creek	San Jose Creek	Coyote Creek	San Gabriel River Reach 1	San Gabriel River Reach 2	San Gabriel River Reach 3	San Gabriel River Reach 4	San Gabriel River Reach 5
<i>Irwindale</i>	X					X	X	X
La Habra Heights		X	X					
La Mirada			X					
La Puente	X	X				X		
La Verne	X	X						
<i>Lakewood</i>			X	X				
<i>Los Angeles (County of)</i>	X	X	X		X	X		X
<i>Los Angeles County Flood Control</i>	X	X	X	X	X	X	X	X
<i>Monrovia</i>								X
Norwalk			X	X				
<i>Pico Rivera</i>					X	X		
Pomona	X	X						
San Dimas	X	X						
Santa Fe Springs			X	X	X			
<i>South El Monte</i>						X		
Walnut	X	X						
West Covina	X	X						
Whittier		X	X		X	X		

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Table K-13: Dominguez Channel Watershed Management Area Toxics TMDL by Reach

DOMINGUEZ CHANNEL WATERSHED MANAGEMENT AREA PERMITTEES	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL					
	Dominguez Channel	Dominguez Channel Estuary	Greater Los Angeles and Long Beach Harbors	Los Angeles River Estuary	Consolidated Slip	Los Angeles River and San Gabriel River
<i>Bellflower</i>			X			
<i>Carson</i>	X	X				
<i>Compton</i>	X	X				
<i>El Segundo</i>	X					
<i>Gardena</i>	X	X				
<i>Hawthorne</i>	X					
<i>Inglewood</i>	X					
<i>Lakewood</i>			X			
<i>Lawndale</i>	X					
<i>Los Angeles (City of)</i>	X	X	X	X	X	
<i>Los Angeles (County of)</i>	X	X	X	X	X	
<i>Los Angeles County Flood Control District</i>	X	X	X	X	X	
<i>Manhattan Beach</i>	X					
<i>Paramount</i>			X			
<i>Rancho Palos Verdes</i>			X			
<i>Redondo Beach</i>	X					
<i>Rolling Hills</i>			X			
<i>Rolling Hills Estates</i>			X			
<i>Signal Hill</i>			X	X		
<i>Torrance</i>	X	X				
Los Angeles River and San Gabriel River Metals TMDLs Responsible Parties¹						see footnote 1 below

¹ Permittees subject to the Los Angeles River Metals TMDL and the San Gabriel River Metals TMDL are required to submit a monitoring plan and a report of implementation.

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ATTACHMENT M. TMDLs IN THE SANTA MONICA BAY WATERSHED MANAGEMENT AREA

A. Santa Monica Bay Beaches Bacteria TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-2.
2. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Santa Monica Bay during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

3. Section A.2 above shall not be applicable upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL (Attachment A of Resolution No. R12-007). Upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL, Permittees shall comply with the following daily maximum final water quality-based effluent limitations for discharges to Santa Monica Bay during dry weather as of the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL and during wet weather no later than July 15, 2021. Permittees shall comply with the following year-round geometric mean final water quality-based effluent limitations for each individual monitoring location no later than July 15, 2021.

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
<u>Total coliform*</u>	<u>10,000/100 mL</u>	<u>1,000/100 mL</u>
<u>Fecal coliform</u>	<u>400/100 mL</u>	<u>200/100 mL</u>
<u>Enterococcus</u>	<u>104/100 mL</u>	<u>35/100 mL</u>

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

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3.4. Receiving Water Limitations

- a. Permittees in each defined jurisdictional group shall comply with the interim single sample bacteria receiving water limitations for shoreline monitoring stations within their jurisdictional area during wet weather, per the schedule below:

Deadline	Cumulative percentage reduction from the total exceedance day reductions required for each jurisdictional group as identified in Table M-1
July 15, 2013	25%
July 15, 2018	50%

- b. Section A.4.a above shall not be applicable upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL (Attachment A of Resolution No. R12-007). Upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL, Permittees in each defined jurisdictional group shall comply with the interim single sample bacteria receiving water limitations for shoreline monitoring stations within their jurisdictional area during wet weather, per the schedule below:

<u>Deadline</u>	<u>Cumulative percentage reduction from the total wet weather exceedance day reductions required for each jurisdictional group as identified in Table M-2</u>
<u>July 15, 2013</u>	<u>25%</u>
<u>July 15, 2018</u>	<u>50%</u>

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Table M-1: Interim Single Sample Bacteria Receiving Water Limitations by Jurisdictional Group

Jurisdiction Group	Primary Jurisdiction	Additional Responsible Jurisdictions & Agencies	Subwatershed(s)	Monitoring Site(s)	Interim Single Sample Bacteria Receiving Water Limitations as Maximum Allowable Exceedance Days during Wet Weather		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
1	County of Los Angeles	Malibu City of Los Angeles (Topanga only) Calabasas (Topanga only)	Arroyo Sequit	SMB 1-1	221	212	197
			Carbon Canyon	SMB 1-13			
			Corral Canyon	SMB 1-11, SMB 1-12			
			Encinal Canyon	SMB 1-3			
			Escondido Canyon	SMB 1-8			
			Las Flores Canyon	SMB 1-14			
			Latigo Canyon	SMB 1-9			
			Los Alisos Canyon	SMB 1-2			
			Pena Canyon	SMB 1-16			
			Piedra Gorda Canyon	SMB 1-15			
			Ramirez Canyon	SMB 1-6, SMB 1-7			
			Solstice Canyon	SMB 1-10			
			Topanga Canyon	SMB 1-18			
			Trancas Canyon	SMB 1-4			
			Tuna Canyon	SMB 1-17			
Zuma Canyon	SMB 1-5						

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Jurisdiction Group	Primary Jurisdiction	Additional Responsible Jurisdictions & Agencies	Subwatershed(s)	Monitoring Site(s)	Interim Single Sample Bacteria Receiving Water Limitations as Maximum Allowable Exceedance Days during Wet Weather		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
2	City of Los Angeles	County of Los Angeles El Segundo (Dockweiler W only) Manhattan Beach (DW only) Culver City (MDR only) Santa Monica	Castlerock	SMB 2-1	342	324	294
			Dockweiler	SMB 2-10, SMB 2-11, SMB 2-12, SMB 2-13, SMB 2-14, SMB 2-15			
			Marina del Rey Venice Beach	SMB 2-8, SMB 2-9			
			Pulga Canyon	SMB 2-4, SMB 2-5			
			Santa Monica Canyon	SMB 2-7			
			Santa Ynez Canyon	SMB 2-2, SMB 2-3, SMB 2-6			
3	Santa Monica	City of Los Angeles County of Los Angeles	Santa Monica	SMB 3-1, SMB 3-2, SMB 3-3, SMB 3-4, SMB 3-5, SMB 3-6, SMB 3-7, SMB 3-8 [#] , SMB 3-9	257	237	203
4	Malibu	County of Los Angeles	Nicholas Canyon	SMB 4-1 [#]	14	14	14
5	Manhattan Beach	El Segundo Hermosa Beach Redondo Beach <u>County of Los Angeles</u>	Hermosa	SMB 5-1 [#] , SMB 5-2, SMB 5-3 [#] , SMB 5-4 [#] , SMB 5-5 [#]	29	29	29

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Jurisdiction Group	Primary Jurisdiction	Additional Responsible Jurisdictions & Agencies	Subwatershed(s)	Monitoring Site(s)	Interim Single Sample Bacteria Receiving Water Limitations as Maximum Allowable Exceedance Days during Wet Weather		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
6	Redondo Beach	Hermosa Beach Manhattan Beach Torrance County of Los Angeles	Redondo	SMB 6-1, SMB 6-2 [#] , SMB 6-3, SMB 6-4, SMB 6-5 [#] , SMB 6-6 [#]	58	57	56
7	Rancho Palos Verdes	City of Los Angeles Palos Verdes Estates Redondo Beach Rolling Hills Rolling Hills Estates Torrance County of Los Angeles	Palos Verdes Peninsula	SMB 7-1 [#] , SMB 7-2 [#] , SMB 7-3 [#] , SMB 7-4 [#] , SMB 7-5 [#] , SMB 7-6 [#] , SMB 7-7, SMB 7-8 [#] , SMB 7-9 [#]	36	36	36

For those beach monitoring locations subject to the antidegradation implementation provision in the TMDL, there shall be no increase in exceedance days during the implementation period above that estimated for the beach monitoring location in the critical year as identified in Table M-3.

* The California Department of Transportation (Caltrans) is a responsible agency in each Jurisdiction Group, except for Jurisdiction 7, and is jointly responsible for complying with the allowable number of exceedance days. Caltrans is separately regulated under the Statewide Storm Water Permit for State of California Department of Transportation (NPDES No. CAS000003).

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Table M-2: Interim Wet Weather Single Sample Bacteria Receiving Water Limitations by Jurisdictional Group

<u>Jurisdiction Group</u>	<u>Primary Jurisdiction</u>	<u>Additional Responsible Jurisdictions & Agencies</u>	<u>Subwatershed(s)</u>	<u>Monitoring Site(s)</u>	<u>Interim Single Sample Bacteria Receiving Water Limitations as Maximum Exceedance Days Beyond those Allowed during Wet Weather</u>		
					<u>10% Reduction Milestone</u>	<u>25% Reduction Milestone</u>	<u>50% Reduction Milestone</u>
<u>1</u>	<u>County of Los Angeles</u>	<u>Malibu</u> <u>City of Los Angeles (Topanga only)</u> <u>Calabasas (Topanga only)</u>	<u>Arroyo Sequit</u>	<u>SMB 1-1</u>	<u>393</u>	<u>327</u>	<u>218</u>
			<u>Carbon Canyon</u>	<u>SMB 1-13</u>			
			<u>Corral Canyon</u>	<u>SMB 1-11,</u> <u>SMB 1-12,</u> <u>SMB O-2[#]</u>			
			<u>Encinal Canyon</u>	<u>SMB 1-3[#]</u>			
			<u>Escondido Canyon</u>	<u>SMB 1-8</u>			
			<u>Las Flores Canyon</u>	<u>SMB 1-14</u>			
			<u>Latigo Canyon</u>	<u>SMB 1-9</u>			
			<u>Los Alisos Canyon</u>	<u>SMB 1-2[#]</u>			
			<u>Pena Canyon</u>	<u>SMB 1-16[#]</u>			
			<u>Piedra Gorda Canyon</u>	<u>SMB 1-15</u>			
			<u>Ramirez Canyon</u>	<u>SMB 1-6,</u> <u>SMB 1-7,</u> <u>SMB O-1[#]</u>			
			<u>Solstice Canyon</u>	<u>SMB 1-10</u>			
			<u>Topanga Canyon</u>	<u>SMB 1-18</u>			
			<u>Trancas Canyon</u>	<u>SMB 1-4</u>			
			<u>Tuna Canyon</u>	<u>SMB 1-17[#]</u>			
<u>Zuma Canyon</u>	<u>SMB 1-5</u>						

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<u>Jurisdiction Group</u>	<u>Primary Jurisdiction</u>	<u>Additional Responsible Jurisdictions & Agencies</u>	<u>Subwatershed(s)</u>	<u>Monitoring Site(s)</u>	<u>Interim Single Sample Bacteria Receiving Water Limitations as Maximum Exceedance Days Beyond those Allowed during Wet Weather</u>		
					<u>10% Reduction Milestone</u>	<u>25% Reduction Milestone</u>	<u>50% Reduction Milestone</u>
<u>2</u>	<u>City of Los Angeles</u>	<u>County of Los Angeles El Segundo (Dockweiler only) Santa Monica</u>	<u>Castlerock</u>	<u>SMB 2-1</u>	<u>382</u>	<u>318</u>	<u>212</u>
			<u>Dockweiler</u>	<u>SMB 2-10, SMB 2-11, SMB 2-12, SMB 2-13, SMB 2-14, SMB 2-15</u>			
			<u>Venice Beach</u>	<u>SMB 2-8, SMB 2-9</u>			
			<u>Pulga Canyon</u>	<u>SMB 2-4, SMB 2-5</u>			
			<u>Santa Monica Canyon</u>	<u>SMB 2-7</u>			
			<u>Santa Ynez Canyon</u>	<u>SMB 2-2, SMB 2-3, SMB 2-6</u>			
<u>3</u>	<u>Santa Monica</u>	<u>City of Los Angeles County of Los Angeles</u>	<u>Santa Monica</u>	<u>SMB 3-1, SMB 3-2, SMB 3-3, SMB 3-4, SMB 3-5, SMB 3-6, SMB 3-7, SMB 3-8, SMB 3-9</u>	<u>219</u>	<u>183</u>	<u>122</u>
<u>4</u>	<u>Malibu</u>	<u>County of Los Angeles</u>	<u>Nicholas Canyon</u>	<u>SMB 4-1#</u>	<u>15</u>	<u>12</u>	<u>8</u>

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<u>Jurisdiction Group</u>	<u>Primary Jurisdiction</u>	<u>Additional Responsible Jurisdictions & Agencies</u>	<u>Subwatershed(s)</u>	<u>Monitoring Site(s)</u>	<u>Interim Single Sample Bacteria Receiving Water Limitations as Maximum Exceedance Days Beyond those Allowed during Wet Weather</u>		
					<u>10% Reduction Milestone</u>	<u>25% Reduction Milestone</u>	<u>50% Reduction Milestone</u>
<u>5</u>	<u>Manhattan Beach</u>	<u>El Segundo</u> <u>Hermosa Beach</u> <u>Redondo Beach</u> <u>County of Los Angeles</u>	<u>Hermosa</u>	<u>SMB 5-1#</u> , <u>SMB 5-2</u> , <u>SMB 5-3#</u> , <u>SMB 5-4#</u> , <u>SMB 5-5#</u>	<u>63</u>	<u>52</u>	<u>35</u>
<u>6</u>	<u>Redondo Beach</u>	<u>Hermosa Beach</u> <u>Manhattan Beach</u> <u>Torrance</u> <u>County of Los Angeles</u>	<u>Redondo</u>	<u>SMB 6-1</u> , <u>SMB 6-2#</u> , <u>SMB 6-3</u> , <u>SMB 6-4</u> , <u>SMB 6-5#</u> , <u>SMB 6-6#</u>	<u>62</u>	<u>51</u>	<u>34</u>
<u>7</u>	<u>Rancho Palos Verdes</u>	<u>City of Los Angeles</u> <u>Palos Verdes Estates</u> <u>Rolling Hills</u> <u>Rolling Hills Estates</u> <u>County of Los Angeles</u>	<u>Palos Verdes Peninsula</u>	<u>SMB 7-1#</u> , <u>SMB 7-2#</u> , <u>SMB 7-3#</u> , <u>SMB 7-4#</u> , <u>SMB 7-5#</u> , <u>SMB 7-6#</u> , <u>SMB 7-7</u> , <u>SMB 7-8#</u> , <u>SMB 7-9#</u>	<u>88</u>	<u>73</u>	<u>49</u>

For those beach monitoring locations subject to the antidegradation implementation provision in the TMDL, there shall be no increase in exceedance days during the implementation period above that estimated for the beach monitoring location in the critical year as identified in Table M-4.

* The California Department of Transportation (Caltrans) is a responsible agency in each Jurisdiction Group, except for Jurisdiction 7, and is jointly responsible for complying with the allowable number of exceedance days. Caltrans is separately regulated under the Statewide Storm Water Permit for State of California Department of Transportation (NPDES No. CAS000003).

b-c. Permittees shall comply with the following grouped⁸ final single sample bacteria receiving water limitations for all shoreline monitoring stations along Santa Monica Bay beaches, except for those monitoring stations subject to the antidegradation implementation provision as established in the TMDL and identified in subpart **ee.** below, during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2021:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
	Daily Sampling	Weekly Sampling
Summer Dry-Weather (April 1 to October 31)	0	0
Winter Dry-Weather (November 1 to March 31)	3	1
Wet Weather ⁹ (Year-round)	17	3

d. Section A.4.c above shall not be applicable upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL (Attachment A of Resolution No. R12-007). Upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL, Permittees shall comply with the following grouped¹⁰ final single sample bacteria receiving water limitations for all shoreline monitoring stations along Santa Monica Bay beaches, except for those monitoring stations subject to the antidegradation implementation provision as established in the TMDL and identified in subpart f. below, during dry weather as of the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL and during wet weather no later than July 15, 2021:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
	Daily Sampling	Weekly Sampling
Summer Dry-Weather (April 1 to October 31)	0	0
Winter Dry-Weather (November 1 to March 31)	9	2
Wet Weather ¹¹ (Year-round)	17	3

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⁸ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the sub-drainage area to each beach monitoring location.

⁹ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

¹⁰ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the sub-drainage area to each beach monitoring location.

¹¹ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

e. Permittees shall comply with the following grouped¹² final single sample bacteria receiving water limitations for shoreline monitoring stations along Santa Monica Bay beaches subject to the antidegradation implementation provision in the TMDL as of the effective date of this Order:

Table M-3: Allowable Number of Days that may Exceed any Single Sample Bacteria Receiving Water Limitations

Station ID	Beach Monitoring Location	Annual Allowable Exceedance Days of the Single Sample Objective (days)					
		<u>Summer Dry Weather (April 1 – October 31)</u>		Winter Dry Weather (November 1 – March 31)		Wet Weather (Year-round November 1 – October 31)	
		<u>Daily Sampling</u>	<u>Weekly Sampling</u>	Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
SMB 1-4	Trancas Creek at Broad Beach	<u>0</u>	<u>0</u>	0	0	17	3
SMB 1-5	Zuma Creek at Zuma Beach	<u>0</u>	<u>0</u>	0	0	17	3
SMB 2-13	Imperial Highway storm drain	<u>0</u>	<u>0</u>	2	1	17	3
SMB 3-8	Windward Ave. storm drain at Venice Pavilion	<u>0</u>	<u>0</u>	2	1	13	2
SMB 4-1	San Nicholas Canyon Creek at Nicholas Beach	<u>0</u>	<u>0</u>	0	0	14	2
SMB 5-1	Manhattan Beach at 40th Street	<u>0</u>	<u>0</u>	1	1	4	1
SMB 5-2	28th Street storm drain at Manhattan Beach	<u>0</u>	<u>0</u>	0	0	17	3
SMB 5-3	Manhattan Beach Pier, southern drain	<u>0</u>	<u>0</u>	1	1	5	1
SMB 5-4	Hermosa City Beach at 26th St.	<u>0</u>	<u>0</u>	3	1	12	2
SMB 5-5	Hermosa Beach Pier	<u>0</u>	<u>0</u>	2	1	8	2
SMB 6-2	Redondo Municipal Pier- 100 yards south	<u>0</u>	<u>0</u>	3	1	14	2

¹² The final receiving water limitations are group-based and shared among all MS4 Permittees located within the sub-drainage area to each beach monitoring location.
Attachment M – TMDLs in the Santa Monica Bay WMA

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		Annual Allowable Exceedance Days of the Single Sample Objective (days)					
Station ID	Beach Monitoring Location	<u>Summer Dry Weather</u> <u>(April 1 – October 31)</u>		Winter Dry Weather (November 1 – March 31)		<u>Wet Weather</u> <u>(Year-round November 4</u> <u>–October 31)</u>	
		<u>Daily</u> <u>Sampling</u>	<u>Weekly</u> <u>Sampling</u>	Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
SMB 6-5	Avenue I storm drain at Redondo Beach	<u>0</u>	<u>0</u>	3	1	6	1
SMB 6-6	Malaga Cove, Palos Verdes Estates	<u>0</u>	<u>0</u>	1	1	3	1
SMB 7-1	Malaga Cove, Palos Verdes Estates	<u>0</u>	<u>0</u>	1	1	14	2
SMB 7-2	Bluff Cove, Palos Verdes Estates	<u>0</u>	<u>0</u>	1	1	0	0
SMB 7-3	Long Point, Rancho Palos Verdes	<u>0</u>	<u>0</u>	1	1	5	1
SMB 7-4	Abalone Cove, Rancho Palos Verdes	<u>0</u>	<u>0</u>	0	0	1	1
SMB 7-5	Portuguese Bend Cove, Rancho Palos Verdes	<u>0</u>	<u>0</u>	1	1	2	1
SMB 7-6	White's Point, Royal Palms County Beach	<u>0</u>	<u>0</u>	1	1	6	1
SMB 7-8	Point Fermin/Wilder Annex, San Pedro	<u>0</u>	<u>0</u>	1	1	2	1
SMB 7-9	Outer Cabrillo Beach	<u>0</u>	<u>0</u>	1	1	3	1

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f. Section A.4.e above shall not be applicable upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL (Attachment A of Resolution No. R12-007). Upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL, Permittees shall comply with the following grouped¹³ final single sample bacteria receiving water limitations for shoreline monitoring stations along Santa Monica Bay beaches subject to the antidegradation implementation provision in the TMDL as of the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL:

Table M-4: Allowable Number of Days that may Exceed any Single Sample Bacteria Receiving Water Limitations

Station ID	Beach Monitoring Location	Annual Allowable Exceedance Days of the Single Sample Objective (days)					
		Summer Dry Weather (April 1 – October 31)		Winter Dry Weather (November 1 – March 31)		Wet Weather (Year-round)	
		Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
<u>SMB 1-2</u>	<u>El Pescador State Beach</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>5</u>	<u>1</u>
<u>SMB 1-3</u>	<u>El Matador State Beach</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>3</u>	<u>1</u>
<u>SMB O-1</u>	<u>Paradise Cove</u>	<u>0</u>	<u>0</u>	<u>9</u>	<u>2</u>	<u>15</u>	<u>3</u>
<u>SMB 1-10</u>	<u>Solstice Creek</u>	<u>0</u>	<u>0</u>	<u>5</u>	<u>1</u>	<u>17</u>	<u>3</u>
<u>SMB O-2</u>	<u>Puerco Canyon Storm Drain</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>6</u>	<u>1</u>
<u>SMB 1-14</u>	<u>Las Flores Creek</u>	<u>0</u>	<u>0</u>	<u>6</u>	<u>1</u>	<u>17</u>	<u>3</u>
<u>SMB 1-16</u>	<u>Pena Creek</u>	<u>0</u>	<u>0</u>	<u>3</u>	<u>1</u>	<u>14</u>	<u>2</u>
<u>SMB 1-17</u>	<u>Tuna Canyon Creek</u>	<u>0</u>	<u>0</u>	<u>7</u>	<u>1</u>	<u>12</u>	<u>2</u>
<u>SMB 2-11</u>	<u>North Westchester Storm Drain</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>17</u>	<u>3</u>
<u>SMB 2-13</u>	<u>Imperial Highway Storm Drain</u>	<u>0</u>	<u>0</u>	<u>4</u>	<u>1</u>	<u>17</u>	<u>3</u>
<u>SMB 3-6</u>	<u>Rose Avenue Storm Drain at Venice Beach</u>	<u>0</u>	<u>0</u>	<u>6</u>	<u>1</u>	<u>17</u>	<u>3</u>
<u>SMB 4-1</u>	<u>San Nicholas Canyon Creek</u>	<u>0</u>	<u>0</u>	<u>4</u>	<u>1</u>	<u>14</u>	<u>2</u>
<u>SMB 5-1</u>	<u>Manhattan State Beach at 40th Street</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>4</u>	<u>1</u>

¹³ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the sub-drainage area to each beach monitoring location.
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		Annual Allowable Exceedance Days of the Single Sample Objective (days)					
Station ID	Beach Monitoring Location	Summer Dry Weather (April 1 – October 31)		Winter Dry Weather (November 1 – March 31)		Wet Weather (Year-round)	
		Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
<u>SMB 5-3</u>	<u>Manhattan Beach Pier, southern drain</u>	<u>0</u>	<u>0</u>	<u>3</u>	<u>1</u>	<u>6</u>	<u>1</u>
<u>SMB 5-4</u>	<u>Hermosa Beach at 26th Street</u>	<u>0</u>	<u>0</u>	<u>3</u>	<u>1</u>	<u>12</u>	<u>2</u>
<u>SMB 5-5</u>	<u>Hermosa Beach Pier</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>1</u>	<u>8</u>	<u>2</u>
<u>SMB 6-2</u>	<u>Redondo Municipal Pier- 100 yards south at Redondo Beach</u>	<u>0</u>	<u>0</u>	<u>3</u>	<u>1</u>	<u>14</u>	<u>2</u>
<u>SMB 6-3</u>	<u>Sapphire Street Storm Drain at Redondo Beach</u>	<u>0</u>	<u>0</u>	<u>5</u>	<u>1</u>	<u>17</u>	<u>3</u>
<u>SMB 6-5</u>	<u>Avenue I Storm Drain at Redondo Beach</u>	<u>0</u>	<u>0</u>	<u>4</u>	<u>1</u>	<u>11</u>	<u>2</u>
<u>SMB 6-6</u>	<u>Malaga Cove, Palos Verdes Estates</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>3</u>	<u>1</u>
<u>SMB 7-1</u>	<u>Malaga Cove</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>14</u>	<u>2</u>
<u>SMB 7-2</u>	<u>Bluff Cove</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>0</u>
<u>SMB 7-3</u>	<u>Long Point</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>5</u>	<u>1</u>
<u>SMB 7-4</u>	<u>Abalone Cove</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>
<u>SMB 7-5</u>	<u>Portuguese Bend Cove</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>1</u>
<u>SMB 7-6</u>	<u>Royal Palms County Beach</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>6</u>	<u>1</u>
<u>SMB 7-8</u>	<u>Wilder Annex</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>1</u>
<u>SMB 7-9</u>	<u>Outer Cabrillo Beach</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>3</u>	<u>1</u>

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e.g. Permittees shall comply with the following geometric mean receiving water limitations for all shoreline monitoring stations along Santa Monica Bay beaches during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

h. Section A.4.g above shall not be applicable upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL (Attachment A of Resolution No. R12-007). Upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL, Permittees shall comply with the following year-round geometric mean receiving water limitations for all shoreline monitoring stations along Santa Monica Bay beaches no later than July 15, 2021:

<u>Constituent</u>	<u>Geometric Mean (MPN or cfu)</u>
<u>Total coliform</u>	<u>1,000/100 mL</u>
<u>Fecal coliform</u>	<u>200/100 mL</u>
<u>Enterococcus</u>	<u>35/100 mL</u>

B. Santa Monica Bay Nearshore and Offshore Debris TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-2.
2. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged into water bodies within the Santa Monica Bay WMA and then into Santa Monica Bay or on the shoreline of Santa Monica Bay no later than March 20, 2020¹⁴, and every year thereafter.
3. Permittees shall comply with interim and final water quality-based effluent limitations for trash discharged into Santa Monica Bay or on the shoreline of Santa Monica Bay, per the schedule below:

Permittees	Baseline ¹⁵	Mar 20, 2016 (80%)	Mar 20, 2017 (60%)	Mar 20, 2018 (40%)	Mar 20, 2019 (20%)	Mar 20, 2020 ¹⁶ (0%)
		Annual Trash Discharge (gals/yr)				

¹⁴ If a Permittee by November 4, 2013, adopts local ordinances to ban plastic bags, smoking in public places and single use expanded polystyrene food packaging then the final compliance date will be extended until March 20, 2023.

¹⁵ If a Permittee elects not to use the default baseline, then the Permittee shall include a plan to establish a site specific trash baseline in their Trash Monitoring and Reporting Plan.

¹⁶ Permittees shall achieve their final effluent limitation of zero trash discharge for the 2019-2020 storm year and every year thereafter.

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Agoura Hills ¹⁷	1,044	835	626	418	209	0
Calabasas ¹⁰	1,656	1,325	994	663	331	0
Culver City	52	42	31	21	10	0
El Segundo	2,732	2,186	1,639	1,093	546	0
Hermosa Beach	1,117	894	670	447	223	0
Los Angeles, City of	25,112	20,090	15,067	10,045	5,022	0
Los Angeles, County of	5,138	4,110	3,083	2,055	1,028	0
Malibu	5,809	4,648	3,486	2,324	1,162	0
Manhattan Beach	2,501	2,001	1,501	1,001	500	0
Palos Verdes Estates	3,346	2,677	2,007	1,338	669	0
Rancho Palos Verdes	7,254	5,803	4,353	2,902	1,451	0
Redondo Beach	3,197	2,558	1,918	1,279	639	0
Rolling Hills	515	412	309	206	103	0
Rolling Hills Estates	365	292	219	146	73	0
Santa Monica	5,672	4,537	3,403	2,269	1,134	0
Torrance	2,484	1,987	1,490	993	497	0
Westlake Village ¹⁰	3,131	2,505	1,879	1,252	626	0

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4. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in B.2 and B.3 above per the provisions in Part VI.E.5.

C. Santa Monica Bay TMDL for DDTs and PCBs (USEPA established)

1. Permittees subject to the provisions below are identified in Attachment K, Table K-2.
2. Permittees shall comply with the following WLAs, expressed as an annual loading of pollutants from the sediment discharged to Santa Monica Bay, per the provisions in Part VI.E.3:

Constituent	Annual Mass-Based WLA (g/yr)
DDT	27.08
PCBs	140.25

3. Compliance shall be determined based on a three-year averaging period.

D. TMDLs in the Malibu Creek Subwatershed

1. Malibu Creek and Lagoon Bacteria TMDL
 - a. Permittees subject to the provisions below are identified in Attachment K, Table K-2.

¹⁷ Permittees shall be deemed in compliance with the water quality-based effluent limitation for trash established to implement the Santa Monica Bay Nearshore and Offshore Debris TMDL, if the Permittee is in compliance with the water quality-based effluent limitations established to implement the Malibu Creek Watershed Trash TMDL.

b. Water Quality-Based Effluent Limitations

- i. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Malibu Lagoon during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
<i>Enterococcus</i>	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

- ii. Section D.1.b.i above shall not be applicable upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL (Attachment A of Resolution No. R12-009). Upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL, Permittees shall comply with the following daily maximum final water quality-based effluent limitations for discharges to Malibu Lagoon during dry weather as of the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL and during wet weather no later than July 15, 2021. Permittees shall comply with the following year-round geometric mean final water quality-based effluent limitations for each monitoring location no later than July 15, 2021.

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
<i>Enterococcus</i>	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

- iii. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Malibu Creek and its tributaries during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
<i>E. coli</i>	235/100 mL	126/100 mL

- iv. Section D.1.b.iii above shall not be applicable upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL (Attachment A of Resolution No. R12-009). Upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL, Permittees shall comply with the following daily maximum final water quality-based effluent limitations for

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discharges to Malibu Creek and its tributaries during dry weather as of the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL and during wet weather no later than July 15, 2021. Permittees shall comply with the following year-round geometric mean final water quality-based effluent limitations for each monitoring location no later than July 15, 2021.

<u>Constituent</u>	<u>Effluent Limitation (MPN or cfu)</u>	
	<u>Daily Maximum</u>	<u>Geometric Mean</u>
<u>E. coli</u>	<u>235/100 mL</u>	<u>126/100 mL</u>

c. Receiving Water Limitations

- i. Permittees shall comply with the following grouped¹⁸ final single sample bacteria receiving water limitations for Malibu Creek, its tributaries, and Malibu Lagoon during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
	Daily Sampling	Weekly Sampling
Summer Dry-Weather (April 1 to October 31)	0	0
Winter Dry-Weather (November 1 to March 31)	3	1
Wet Weather ¹⁹ (Year-round)	17	3

- ii. Section D.1.c.i above shall not be applicable upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL (Attachment A of Resolution No. R12-009). Upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL, Permittees shall comply with the following grouped²⁰ final single sample bacteria receiving water limitations for each monitoring location within Malibu Creek and its tributaries during dry weather as of the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL and during wet weather no later than July 15, 2021:

<u>Time Period</u>	<u>Annual Allowable Exceedance Days of the Single Sample Objective (days)</u>	
	<u>Daily Sampling</u>	<u>Weekly Sampling</u>
<u>Dry-Weather (Year-round)</u>	<u>5</u>	<u>1</u>
<u>Wet Weather²¹ (Year-round)</u>	<u>15</u>	<u>2</u>

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¹⁸ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area to the receiving water.

¹⁹ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

²⁰ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area to the receiving water.

²¹ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

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iii. Section D.1.c.i above shall not be applicable upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL (Attachment A of Resolution No. R12-009). Upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL, Permittees shall comply with the following grouped²² final single sample bacteria receiving water limitations for each monitoring location within Malibu Lagoon during dry weather as of the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL and during wet weather no later than July 15, 2021:

<u>Time Period</u>	<u>Annual Allowable Exceedance Days of the Single Sample Objective (days)</u>	
	<u>Daily Sampling</u>	<u>Weekly Sampling</u>
<u>Summer Dry-Weather (April 1 to October 31)</u>	<u>0</u>	<u>0</u>
<u>Winter Dry-Weather (November 1 to March 31)</u>	<u>9</u>	<u>2</u>
<u>Wet Weather²³ (Year-round)</u>	<u>17</u>	<u>3</u>

iv. Permittees shall comply with the following geometric mean receiving water limitations for discharges to Malibu Lagoon during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

<u>Constituent</u>	<u>Geometric Mean (MPN or cfu)</u>
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

v. Section D.1.c.iv above shall not be applicable upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL (Attachment A of Resolution No. R12-009). Upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL, Permittees shall comply with the following year-round geometric mean receiving water limitations for discharges to Malibu Lagoon no later than July 15, 2021:

<u>Constituent</u>	<u>Geometric Mean (MPN or cfu)</u>
<u>Total coliform</u>	<u>1,000/100 mL</u>
<u>Fecal coliform</u>	<u>200/100 mL</u>
<u>Enterococcus</u>	<u>35/100 mL</u>

²² The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area to the receiving water.

²³ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

iii.vi. Permittees shall comply with the following geometric mean receiving water limitation for discharges to Malibu Creek and its tributaries during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
<i>E. coli</i>	126/100 mL

vii. Section D.1.c.vi above shall not be applicable upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL (Attachment A of Resolution No. R12-009). Upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL, Permittees shall comply with the following year-round geometric mean receiving water limitations for discharges to Malibu Creek and its tributaries no later than July 15, 2021:

<u>Constituent</u>	<u>Geometric Mean (MPN or cfu)</u>
<u><i>E. coli</i></u>	<u>126/100 mL</u>

2. Malibu Creek Watershed Trash TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-2.
- b. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Malibu Creek from Malibu Lagoon to Malibou Lake, Malibu Lagoon, Malibou Lake, Medea Creek, Lindero Creek, Lake Lindero, and Las Virgenes Creek in the Malibu Creek Watershed no later than July 7, 2017 and every year thereafter.
- c. Permittees shall comply with interim and final water quality-based effluent limitations for trash discharged to the Malibu Creek, per the schedule below:

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Permittees	Baseline	July 7, 2013 (80%)	July 7, 2014 (60%)	July 7, 2015 (40%)	July 7, 2016 (20%)	July 7, 2017 (0%)
	Annual Trash Discharge (gals/yr)					
Agoura Hills	1810	1448	1086	724	362	0
Calabasas	673	539	404	269	135	0
Hidden Hills	71	57	43	28	14	0
Los Angeles County	1117	894	670	447	223	0
Malibu	226	181	136	91	45	0
Westlake Village	143	114	86	57	29	0

d. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in D.2.b and D.2.c above per the provisions in Part VI.E.5.

3. Malibu Creek Watershed Nutrients TMDL (*USEPA established*)

a. Permittees subject to the provisions below are identified in Attachment K, Table K-2.

b. Permittees shall comply with the following grouped²⁴ WLAs per the provisions in Part VI.E.3 for discharges to Westlake Lake, Lake Lindero, Lindero Creek, Las Virgenes Creek, Medea Creek, Malibu Lake, Malibu Creek and Malibu Lagoon and its tributaries. Tributaries to Malibu Creek and Lagoon, include the following upstream water bodies; Triunfo Creek, Palo Comado Creek, Cheesebro Creek, Strokes Creek and Cold Creek.

Time Period	WLA	
	Nitrate as Nitrogen plus Nitrite as Nitrogen	Total Phosphorus
	Daily Maximum	Daily Maximum
Summer (April 15 to November 15) ²⁵	8 lbs/day	0.8 lbs/day
Winter (November 16 to April 14)	8 mg/L	n/a

E. TMDLs in the Ballona Creek Subwatershed

1. Ballona Creek Trash TMDL

a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.

²⁴ USEPA was unable to specifically distinguish the amounts of pollutant loads from allocation categories associated with areas regulated by the storm water permits. Therefore, allocations for storm water permits are grouped.

²⁵ The mass-based summer WLAs are calculated as the sum of the allocations for “runoff from developed areas” and “dry weather urban runoff.”

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- b. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Ballona Creek no later than September 30, 2015 and every year thereafter.
- c. Permittees shall comply with the interim and final water quality-based effluent limitations for trash discharged to Ballona Creek, per the schedule below:

**Ballona Creek Subwatershed Trash Effluent Limitations per Storm Year²⁶
(pounds of drip-dry trash)**

Permittees	Baseline	Sept 30, 2012 (20%)	Sept 30, 2013 (10%)	Sept 30, 2014 (3.3%)	Sept 30, 2015 ²⁷ (0%)
		Annual Trash Discharge (pounds of trash)			
Beverly Hills	70,712	14,142	7,071	2,333	0
Culver City	37,271	7,454	3,727	1,230	0
Inglewood	22,324	4,465	2,232	737	0
Los Angeles, City of	942,720	188,544	94,272	31,110	0
Los Angeles, County of	52,693	10,539	5,269	1,739	0
Santa Monica	2,579	516	258	85	0
West Hollywood	13,411	2,682	1,341	443	0

**Ballona Creek Subwatershed Trash Effluent Limitations per Storm Year
(gallons of uncompressed trash)**

Permittees	Baseline	Sept 30, 2012 (20%)	Sept 30, 2013 (10%)	Sept 30, 2014 (3.3%)	Sept 30, 2015 ¹⁶ (0%)
		Annual Trash Discharge (gallons of uncompressed trash)			
Beverly Hills	45,336	9,067	4,534	1,496	0
Culver City	25,081	5,016	2,508	828	0
Inglewood	14,717	2,943	1,472	486	0
Los Angeles, City of	602,068	120,414	60,207	19,868	0
Los Angeles, County of	32,679	6,536	3,268	1,078	0
Santa Monica	1,749	350	175	58	0
West Hollywood	9,360	1,872	936	309	0

- d. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in E.1.b and E.1.c above per the provisions in Part VI.E.5.

²⁶ For purposes of the provisions in this subpart, a storm year is defined as October 1 to September 30.

²⁷ Permittees shall achieve their final water quality-based effluent limitation of zero trash discharged for the 2014-2015 storm year and every year thereafter.

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2. Ballona Creek Estuary Toxic Pollutants TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.
- b. Permittees shall comply with the following final water quality-based effluent limitations no later than January 11, 2021, expressed as an annual loading of sediment-bound pollutants deposited to Ballona Creek Estuary:

Constituent	Effluent Limitations	
	Annual	Units
Cadmium	8.0	kg/yr
Copper	227.3	kg/yr
Lead	312.3	kg/yr
Silver	6.69	kg/yr
Zinc	1003	kg/yr
Chlordane	3.34	g/yr
DDTs	10.56	g/yr
Total PCBs	152	g/yr
Total PAHs	26,900	g/yr

- c. Permittees shall comply with interim and final water quality-based effluent limitations for sediment-bound pollutant loads deposited to Ballona Creek Estuary, per the schedule below:

Deadline	Total Drainage Area Served by the MS4 required to meet the water quality-based effluent limitations (%)
January 11, 2013	25
January 11, 2015	50
January 11, 2017	75
January 11, 2021	100

- d. Permittees shall be deemed in compliance with the water quality-based effluent limitations in Part E.2.b by demonstrating any one of the following:
 - i. Final water quality-based effluent limitations for sediment-bound pollutants deposited to Ballona Creek Estuary are met; or
 - ii. The sediment numeric targets as defined in the TMDL are met in bed sediments; or
 - iii. Concentrations of sediments discharged meet the numeric targets for sediment as defined in the TMDL.

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3. Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL

a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.

b. Water Quality-Based Effluent Limitations

i. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Ballona Creek Estuary; ~~Ballona Creek Reach 2 at the confluence with Ballona Creek Estuary; and Centinela Creek at the confluence with Ballona Creek Estuary~~ during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
<i>Enterococcus</i>	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

ii. Section E.3.b.i above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following daily maximum final water quality-based effluent limitations for discharges to Ballona Creek Estuary during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021. Permittees shall comply with the following year-round geometric mean final water quality-based effluent limitations for each monitoring location no later than July 15, 2021.

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
<u>Total coliform*</u>	<u>10,000/100 mL</u>	<u>1,000/100 mL</u>
<u>Fecal coliform</u>	<u>400/100 mL</u>	<u>200/100 mL</u>
<u><i>Enterococcus</i></u>	<u>104/100 mL</u>	<u>35/100 mL</u>

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

~~ii.iii.~~ Permittees shall comply with the following final water quality-based effluent limitations for discharges to Sepulveda Channel during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
<i>E. coli</i>	235/100 mL	126/100 mL

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iv. Section E.3.b.iii above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following daily maximum final water quality-based effluent limitations for discharges to Sepulveda Channel during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021. Permittees shall comply with the following year-round geometric mean final water quality-based effluent limitations for each monitoring location no later than July 15, 2021.

<u>Constituent</u>	<u>Effluent Limitation (MPN or cfu)</u>	
	<u>Daily Maximum</u>	<u>Geometric Mean</u>
<u>E. coli</u>	<u>235/100 mL</u>	<u>126/100 mL</u>

iii.v. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Ballona Creek Reach 2; ~~Ballona Creek Reach 1 at the confluence with Ballona Creek Reach 2; and Benedict Canyon Channel at the confluence with Ballona Creek Reach 2~~ during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
<i>E. coli</i>	576/100 mL	126/100 mL

vi. Section E.3.b.v above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following daily maximum final water quality-based effluent limitations for discharges to Ballona Creek Reach 2 during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021. Permittees shall comply with the following year-round geometric mean final water quality-based effluent limitations for each monitoring location no later than July 15, 2021.

<u>Constituent</u>	<u>Effluent Limitation (MPN or cfu)</u>	
	<u>Daily Maximum</u>	<u>Geometric Mean</u>
<u>E. coli</u>	<u>576/100 mL</u>	<u>126/100 mL</u>

iv.vii. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Ballona Creek Reach 1 during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean

Fecal coliform	4000/100 mL	2000/100 mL
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viii. Section E.3.b.vii above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following daily maximum final water quality-based effluent limitations for discharges to Ballona Creek Reach 1 during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021. Permittees shall comply with the following year-round geometric mean final water quality-based effluent limitations for each monitoring location no later than July 15, 2021.

<u>Constituent</u>	<u>Effluent Limitation (MPN or cfu)</u>	
	<u>Daily Maximum</u>	<u>Geometric Mean</u>
<u>Fecal coliform</u>	<u>4000/100 mL</u>	<u>2000/100 mL</u>

c. Receiving Water Limitations

i. Permittees shall comply with the following grouped²⁸ single sample bacteria receiving water limitations for Ballona Creek Estuary; Ballona Creek Reach 2 at the confluence with Ballona Creek Estuary; Centinela Creek at the confluence with Ballona Creek Estuary; Ballona Creek Reach 2; Ballona Creek Reach 1 at the confluence with Reach 2; Benedict Canyon Channel at the confluence with Ballona Creek Reach 2; and Sepulveda Channel:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective*		Deadline
	Daily Sampling	Weekly Sampling	
Summer Dry-Weather (April 1 to October 31)	0	0	April 27, 2013
Winter Dry-Weather (November 1 to March 31)	3	1	April 27, 2013
Wet Weather ²⁹ (Year-round)	17**	3	July 15, 2021

* Exceedance days for Ballona Creek Estuary and at the confluence with Ballona Creek Estuary based on REC-1 marine water single sample bacteria water quality objectives (WQO). Exceedance days for Ballona Creek Reach 2 and at the confluence with Ballona Creek Reach 2 based on LREC-1 freshwater single sample bacteria WQO. Exceedance days for Sepulveda Channel based on REC-1 freshwater single sample bacteria WQO.

** In Ballona Creek Reach 2 and at the confluence with Reach 2, the greater of the allowable exceedance days under the reference system approach or high flow suspension shall apply.

ii. Section E.3.c.i above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of

²⁸ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

²⁹ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

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the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following grouped³⁰ single sample bacteria receiving water limitations for Ballona Creek Estuary; Ballona Creek Reach 2 at the confluence with Ballona Creek Estuary; and Centinela Creek at the confluence with Ballona Creek Estuary:

<u>Time Period</u>	<u>Annual Allowable Exceedance Days of the REC-1 Marine Water Single Sample Bacteria Water Quality Objectives</u>		<u>Deadline</u>
	<u>Daily Sampling</u>	<u>Weekly Sampling</u>	
<u>Summer Dry-Weather (April 1 to October 31)</u>	<u>0</u>	<u>0</u>	<u>April 27, 2013</u>
<u>Winter Dry-Weather (November 1 to March 31)</u>	<u>9</u>	<u>2</u>	<u>April 27, 2013</u>
<u>Wet Weather³¹ (Year-round)</u>	<u>17</u>	<u>3</u>	<u>July 15, 2021</u>

iii. Section E.3.c.i above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following grouped³² single sample bacteria receiving water limitations for Sepulveda Channel:

<u>Time Period</u>	<u>Annual Allowable Exceedance Days of the REC-1 Fresh Water Single Sample Bacteria Water Quality Objectives</u>		<u>Deadline</u>
	<u>Daily Sampling</u>	<u>Weekly Sampling</u>	
<u>Dry-Weather</u>	<u>5</u>	<u>1</u>	<u>April 27, 2013</u>
<u>Wet Weather³¹</u>	<u>15</u>	<u>2</u>	<u>July 15, 2021</u>

iv. Section E.3.c.i above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following grouped³² single sample bacteria receiving water limitations for Ballona Creek Reach 2; Ballona Creek Reach 1 at the confluence with Reach 2; and Benedict Canyon Channel at the confluence with Ballona Creek Reach 2:

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³⁰ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

³¹ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

³² The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

<u>Time Period</u>	<u>Annual Allowable Exceedance Days of the LREC-1 Fresh Water Single Sample Bacteria Water Quality Objectives</u>		<u>Deadline</u>
	<u>Daily Sampling</u>	<u>Weekly Sampling</u>	
<u>Dry-Weather</u>	<u>5</u>	<u>1</u>	<u>April 27, 2013</u>
<u>Wet Weather³¹</u>	<u>15*</u>	<u>2</u>	<u>July 15, 2021</u>

* In Ballona Creek Reach 2 and at the confluence with Reach 2, the greater of the allowable exceedance days under the reference system approach or high flow suspension shall apply.

ii.v. Permittees shall not exceed the single sample bacteria objective of 4000/100 ml in more than 10% of the samples collected from Ballona Creek Reach 1 during any 30-day period. Permittees shall achieve compliance with this receiving water limitation during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021.

iii.vi. Permittees shall comply with the following geometric mean receiving water limitations for discharges to Ballona Creek Estuary; Ballona Creek Reach 2 at the confluence with Ballona Creek Estuary; and Centinela Creek at the confluence with Ballona Creek Estuary during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
<i>Enterococcus</i>	35/100 mL

vii. Section E.3.c.vi above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following year-round geometric mean receiving water limitations for discharges to Ballona Creek Estuary; Ballona Creek Reach 2 at the confluence with Ballona Creek Estuary; and Centinela Creek at the confluence with Ballona Creek Estuary no later than July 15, 2021:

<u>Constituent</u>	<u>Geometric Mean (MPN or cfu)</u>
<u>Total coliform</u>	<u>1,000/100 mL</u>
<u>Fecal coliform</u>	<u>200/100 mL</u>
<u><i>Enterococcus</i></u>	<u>35/100 mL</u>

iv.viii. Permittees shall comply with the following geometric mean receiving water limitation for discharges to Ballona Creek Reach 2; Ballona Creek Reach 1 at the confluence with Ballona Creek Reach 2; Benedict Canyon Channel at the confluence with Ballona Creek Reach 2; and Sepulveda Channel during dry

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weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
<i>E. coli</i>	126/100 mL

ix. Section E.3.c.viii above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following year-round geometric mean receiving water limitation for discharges to Ballona Creek Reach 2; Ballona Creek Reach 1 at the confluence with Ballona Creek Reach 2; Benedict Canyon Channel at the confluence with Ballona Creek Reach 2; and Sepulveda Channel no later than July 15, 2021:

<u>Constituent</u>	<u>Geometric Mean (MPN or cfu)</u>
<u><i>E. coli</i></u>	<u>126/100 mL</u>

v.x. Permittees shall comply with the following geometric mean receiving water limitation for discharges to Ballona Creek Reach 1 during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Fecal coliform	2000/100 mL

xi. Section E.3.c.x above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following year-round geometric mean receiving water limitation for discharges to Ballona Creek Reach 1 no later than July 15, 2021:

<u>Constituent</u>	<u>Geometric Mean (MPN or cfu)</u>
<u>Fecal coliform</u>	<u>2000/100 mL</u>

4. Ballona Creek Metals TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.
- b. Final Water Quality-Based Effluent Limitations

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- i. Permittees shall comply with the following dry weather³³ water quality-based effluent limitations no later than January 11, 2016, expressed as total recoverable metals discharged to Ballona Creek and Sepulveda Channel:

Constituent	Effluent Limitation Daily Maximum (g/day)	
	Ballona Creek	Sepulveda Channel
Copper	807.7	365.6
Lead	432.6	196.1
Selenium	169	76
Zinc	10,273.1	4,646.4

- ii. In lieu of calculating loads, Permittees may demonstrate compliance with the following concentration-based water quality-based effluent limitations during dry weather³⁴ no later than January 11, 2016, expressed as total recoverable metals discharged to Ballona Creek and Sepulveda Channel:

Constituent	Effluent Limitation Daily Maximum (µg/L)
Copper	24
Lead	13
Selenium	5
Zinc	304

- iii. Permittees shall comply with the following wet weather³⁵ water quality-based effluent limitations no later than January 11, 2021, expressed as total recoverable metals discharged to Ballona Creek and its tributaries:

Constituent	Effluent Limitation Daily Maximum (g/day)
Copper	1.70×10^{-5} x daily storm volume (L)
Lead	5.58×10^{-5} x daily storm volume (L)
Selenium	4.73×10^{-6} x daily storm volume (L)
Zinc	1.13×10^{-4} x daily storm volume (L)

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³³ Dry weather is defined as any day when the maximum daily flow in Ballona Creek is less than 40 cubic feet per second (cfs) measured at Sawtelle Avenue.

³⁴ Ibid.

³⁵ Wet weather is defined as any day when the maximum daily flow in Ballona Creek is equal to or greater than 40 cubic feet per second (cfs) measured at Sawtelle Avenue.

- c. Permittees shall comply with interim and final water quality-based effluent limitations for metals discharged to Ballona Creek and its tributaries, per the schedule below:

Deadline	Total Drainage Area Served by the MS4 required to meet the water quality-based effluent limitations (%)	
	Dry weather	Wet weather
January 11, 2012	50	25
January 11, 2014	75	--
January 11, 2016	100	50
January 11, 2021	100	100

- 5. Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation (*USEPA established*)
 - a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.
 - b. Permittees shall comply with the following grouped³⁶ WLA per the provisions in Part VI.E.3 for discharges of sediment into Ballona Creek Wetlands:

Constituent	Annual WLA ³⁷ (m ³ /yr)
Total Sediment (suspended sediment plus sediment bed load)	44,615

F. TMDLs in Marina del Rey Subwatershed

- 1. Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL
 - a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.
 - b. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Marina del Rey Harbor Beach and Back Basins D, E, and F during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

³⁶ The WLA is group-based and shared among all MS4 Permittees located within the drainage area.

³⁷ The WLA is applied as a 3-year average.

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c. Section F.1.b above shall not be applicable upon the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL (Attachment B of Resolution No. R12-007). Upon the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL, Permittees shall comply with the following daily maximum final water quality-based effluent limitations for discharges to Marina del Rey Harbor Beach and Back Basins D, E, and F during dry weather as of the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL and during wet weather no later than July 15, 2021. Permittees shall comply with the following year-round geometric mean final water quality-based effluent limitations for each monitoring location no later than July 15, 2021.

<u>Constituent</u>	<u>Effluent Limitations (MPN or cfu)</u>	
	<u>Daily Maximum</u>	<u>Geometric Mean</u>
<u>Total coliform*</u>	<u>10,000/100 mL</u>	<u>1,000/100 mL</u>
<u>Fecal coliform</u>	<u>400/100 mL</u>	<u>200/100 mL</u>
<u>Enterococcus</u>	<u>104/100 mL</u>	<u>35/100 mL</u>

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

e.d. Receiving Water Limitations

i. Permittees shall comply with the following grouped³⁸ final single sample bacteria receiving water limitations for all monitoring stations at Marina Beach and Basins D, E, and F, except for those monitoring stations subject to the antidegradation implementation provisions in the TMDL and identified in subpart iii. below, during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2021.

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
	Daily Sampling	Weekly Sampling
Summer Dry-Weather (April 1 to October 31)	0	0
Winter Dry-Weather (November 1 to March 31)	3	1
Wet Weather ³⁹ (Year-round)	17	3

ii. Section F.1.d.i above shall not be applicable upon the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL (Attachment B of Resolution No. R12-007). Upon the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria

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³⁸ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

³⁹ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

TMDL, Permittees shall comply with the following grouped⁴⁰ final single sample bacteria receiving water limitations for all monitoring stations at Marina Beach and Basins D, E, and F, except for those monitoring stations subject to the antidegradation implementation provision in the TMDL and identified in subpart iv. below, during dry weather as of the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL and during wet weather no later than July 15, 2021.

<u>Time Period</u>	<u>Annual Allowable Exceedance Days of the Single Sample Objective (days)</u>	
	<u>Daily Sampling</u>	<u>Weekly Sampling</u>
<u>Summer Dry-Weather (April 1 to October 31)</u>	<u>0</u>	<u>0</u>
<u>Winter Dry-Weather (November 1 to March 31)</u>	<u>9</u>	<u>2</u>
<u>Wet Weather⁴¹ (Year-round)</u>	<u>17</u>	<u>3</u>

ii.iii. Permittees shall comply with the following grouped⁴² final single sample bacteria receiving water limitations for monitoring stations in Marina del Rey subject to the antidegradation implementation provision in the TMDL as of the effective date of this Order:

		Annual Allowable Exceedance Days of the Single Sample Objective (days)					
Station ID	Monitoring Location	<u>Summer Dry-Weather (April 1 to October 31)</u>		Winter Dry Weather (November 1 – March 31)		Wet Weather (Year-round 1 – October 31)	
		<u>Daily Sampling</u>	<u>Weekly Sampling</u>	Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
MdRH-9	Basin F, center of basin	<u>0</u>	<u>0</u>	3	1	8	1

iv. Section F.1.d.iii above shall not be applicable upon the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL (Attachment B of Resolution No. R12-007). Upon the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL, Permittees shall comply with the following grouped⁴³ final single sample bacteria receiving water limitations for monitoring stations in Marina del Rey subject to the antidegradation implementation provision in the TMDL

⁴⁰ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

⁴¹ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

⁴² The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

⁴³ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

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as of the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL:

		<u>Annual Allowable Exceedance Days of the Single Sample Objective (days)</u>					
<u>Station ID</u>	<u>Monitoring Location</u>	<u>Summer Dry-Weather (April 1 to October 31)</u>		<u>Winter Dry Weather (November 1 – March 31)</u>		<u>Wet Weather (Year-round)</u>	
		<u>Daily Sampling</u>	<u>Weekly Sampling</u>	<u>Daily Sampling</u>	<u>Weekly Sampling</u>	<u>Daily Sampling</u>	<u>Weekly Sampling</u>
<u>MdRH-9</u>	<u>Basin F, center of basin</u>	<u>0</u>	<u>0</u>	<u>9</u>	<u>2</u>	<u>8</u>	<u>1</u>

REVISITED TENTATIVE

iii.v. Permittees shall comply with the following geometric mean receiving water limitations for monitoring stations at Marina Beach and Basins D, E, and F during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

vi. Section F.1.d.v above shall not be applicable upon the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL (Attachment B of Resolution No. R12-007). Upon the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL, Permittees shall comply with the following year-round geometric mean receiving water limitations for monitoring stations at Marina Beach and Basins D, E, and F no later than July 15, 2021:

<u>Constituent</u>	<u>Geometric Mean (MPN or cfu)</u>
<u>Total coliform</u>	<u>1,000/100 mL</u>
<u>Fecal coliform</u>	<u>200/100 mL</u>
<u>Enterococcus</u>	<u>35/100 mL</u>

2. Marina del Rey Harbor Toxic Pollutants TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.
- b. Permittees shall comply with the following final water quality-based effluent limitations no later than March 22, 2016⁴⁴, expressed as an annual loading of

⁴⁴ If an Integrated Water Resources Approach is approved by the Regional Water Board and implemented then the Permittees shall comply with the final water quality-based effluent limitations no later than March 22, 2021.

pollutants associated with total suspended solids (TSS) discharged to Marina del Rey Harbor Back Basins D, E, and F:

Constituent	Effluent Limitations	
	Annual	Units
Copper	2.01	kg/yr
Lead	2.75	kg/yr
Zinc	8.85	kg/yr
Chlordane	0.0295	g/yr
Total PCBs	1.34	g/yr

- c. Permittees shall comply with interim and final water quality-based effluent limitations for pollutant loads associated with TSS discharged to Marina del Rey Harbor Back Basins D, E, and F, per the schedule below:

Deadline	Total Drainage Area Served by the MS4 required to meet the effluent limitations (%)
March 22, 2014	50
March 22, 2016	100

- d. If an approved Integrated Water Resources Approach is implemented, Permittees shall comply with interim and final water quality-based effluent limitations for pollutant loads associated with TSS discharged to Marina del Rey Harbor Back Basins D, E, and F, per the schedule below:

Deadline	Total Drainage Area Served by the MS4 required to meet the effluent limitations (%)
March 22, 2013	25
March 22, 2015	50
March 22, 2017	75
March 22, 2021	100

- e. Permittees shall be deemed in compliance with the water quality-based effluent limitations in Part F.2.b by demonstrating any one of the following:
- i. Final water quality-based effluent limitations for pollutants associated with TSS discharged to Marina del Rey Harbor Back Basins D, E, and F are met; or
 - ii. The sediment numeric targets as defined in the TMDL are met in bed sediments; or

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- iii. Pollutant concentrations associated with TSS discharged meet the numeric targets for sediment as defined in the TMDL.

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ATTACHMENT N. TMDLs IN DOMINGUEZ CHANNEL AND GREATER HARBOR WATERS WATERSHED MANAGEMENT AREA

A. Los Angeles Harbor Bacteria TMDL (Inner Cabrillo Beach and Main Ship Channel)

1. Permittees subject to the provisions below are identified in Attachment K, Table K-4.
2. Permittees shall comply with the following final water quality-based effluent limitations for discharges to the Los Angeles Harbor Main Ship Channel, Los Angeles and Long Beach Inner Harbor, and Inner Cabrillo Beach as of the effective date of this Order:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
<i>Enterococcus</i>	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

3. Receiving Water Limitations

- a. Permittees shall comply with the following final single sample bacteria receiving water limitations for the Los Angeles Harbor Main Ship Channel and Inner Cabrillo Beach as of the effective date of this Order:

Time Period	Receiving Water	Compliance Monitoring Location	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
			Daily sampling	Weekly sampling
Summer Dry-Weather (April 1 to October 31)	Inner Cabrillo Beach	CB1 & CB2	0	0
	Main Ship Channel	HW07	0	0
Winter Dry-Weather (November 1 to March 31)	Inner Cabrillo Beach	CB1 & CB2	0	0
	Main Ship Channel	HW07	3	1
Wet Weather ⁴⁵ <u>(Year-round)</u>	Inner Cabrillo Beach	CB1 & CB2	0	0
	Main Ship Channel	HW07	15	3

- b. Section A.3.a above shall not be applicable upon the effective date of the revised Los Angeles Harbor Bacteria TMDL (Attachment C of Resolution No. R12-007). Upon the effective date of the revised Los Angeles Harbor Bacteria TMDL, Permittees shall comply with the following final single sample bacteria receiving water limitations for the

⁴⁵ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.
Attachment N –TMDLs in the Dominguez Channel and Greater Harbor Waters WMA

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Los Angeles Harbor Main Ship Channel and Inner Cabrillo Beach as of the effective date of the revised Los Angeles Harbor Bacteria TMDL:

<u>Time Period</u>	<u>Receiving Water</u>	<u>Compliance Monitoring Location</u>	<u>Annual Allowable Exceedance Days of the Single Sample Objective (days)</u>	
			<u>Daily sampling</u>	<u>Weekly sampling</u>
<u>Summer Dry-Weather (April 1 to October 31)</u>	<u>Inner Cabrillo Beach</u>	<u>CB1 & CB2</u>	<u>0</u>	<u>0</u>
	<u>Main Ship Channel</u>	<u>HW07</u>	<u>0</u>	<u>0</u>
<u>Winter Dry-Weather (November 1 to March 31)</u>	<u>Inner Cabrillo Beach</u>	<u>CB1 & CB2</u>	<u>0</u>	<u>0</u>
	<u>Main Ship Channel</u>	<u>HW07</u>	<u>8</u>	<u>1</u>
<u>Wet Weather⁴⁶ (Year-round)</u>	<u>Inner Cabrillo Beach</u>	<u>CB1 & CB2</u>	<u>0</u>	<u>0</u>
	<u>Main Ship Channel</u>	<u>HW07</u>	<u>15</u>	<u>3</u>

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b.c. Permittees shall comply with the following geometric mean receiving water limitations for the Los Angeles Harbor Main Ship Channel, Los Angeles and Long Beach Inner Harbor, and Inner Cabrillo Beach as of the effective date of this Order at all times:

Constituent	Geometric Mean
Total coliform	1,000 MPN/100 mL
Fecal coliform	200 MPN/100 mL
<i>Enterococcus</i>	35 MPN/100 mL

B. Machado Lake Trash TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-4.
2. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Machado Lake no later than March 6, 2016, and every year thereafter.
3. Permittees shall comply with interim and final water quality-based effluent limitations for trash discharged to Machado Lake, per the schedule below:

**Machado Lake Trash Water Quality-Based Effluent Limitations
(gallons of uncompressed trash per year)**

Permittees	Baseline⁴⁷	3/6/2012 (80%)	3/6/2013 (60%)	3/6/2014 (40%)	3/6/2015 (20%)	3/6/2016⁴⁸ (0%)

⁴⁶ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

⁴⁷ The Regional Water Board calculated the baseline water quality-based effluent limitations for the Permittees based on the estimated trash generation rate of 5334 gallons of uncompressed trash per square mile per year.

⁴⁸ Permittees shall achieve their final effluent limitation of zero trash discharge for the 2015-2016 storm year and every year thereafter.

		Annual Trash Discharge (gallons/yr)				
Carson	8141	6513	4885	3257	1628	0
Lomita	9393	7514	5636	3757	1879	0
City of Los Angeles	12331	9865	7399	4932	2466	0
Los Angeles County	8304	6643	4982	3322	1661	0
Los Angeles County Flood Control District	16	13	10	7	3	0
Palos Verdes Estates	1976	1581	1186	791	395	0
Rancho Palos Verdes	5227	4181	3136	2091	1045	0
Redondo Beach	18	15	11	7	4	0
Rolling Hills	7004	5603	4202	2801	1401	0
Rolling Hills Estates	14722	11777	8833	5889	2944	0
Torrance	34809	27847	20885	13924	6962	0

4. If a Permittee opts to derive a site specific trash generation rate through its Trash Monitoring and Reporting Plan (TMRP), the baseline limitation will be calculated by multiplying the point source area(s) by the derived trash generation rate(s).
5. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in B.2 and B.3 above per the provisions in Part VI.E.5.

C. Machado Lake Nutrient TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-4.
2. Permittees shall comply with the following interim and final water quality-based effluent limitations for discharges to Machado Lake:

Deadline	Interim and Final Effluent Limitations	
	Monthly Average Total Phosphorus (mg/L)	Monthly Average Total Nitrogen (TKN+NO ₃ -N+NO ₂ -N) (mg/L)
As of the effective date of this Order	1.25	3.5
March 11, 2014	1.25	2.45
September 11, 2018	0.10	1.0

3. Compliance Determination
 - a. Permittees may be deemed in compliance with the water quality-based effluent limitations by actively participating in a Lake Water Quality Management Plan (LWQMP) and attaining the receiving water limitations for Machado Lake. The City of Los Angeles has entered into a Memorandum of Agreement with the Regional Water Board to implement the LWQMP and reduce external nutrient loading to attain the following receiving water limitations:

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Deadline	Interim and Final Receiving Water Limitations	
	Monthly Average Total Phosphorus (mg/L)	Monthly Average Total Nitrogen (TKN+NO ₃ -N+NO ₂ -N) (mg/L)
As of the effective date of this Order	1.25	3.5
March 11, 2014	1.25	2.45
September 11, 2018	0.10	1.0

- b. Permittees may be deemed in compliance with water quality-based effluent limitations by demonstrating reduction of total nitrogen and total phosphorous on an annual mass basis measured at the storm drain outfall of the Permittee's drainage area where approved by the Regional Water Board Executive Officer based on the results of a special study by the Permittee.⁴⁹
 - i. The County of Los Angeles submitted a special study work plan, which was approved by the Regional Water Board Executive Officer, and established the following annual mass-based water quality based effluent limitations:

Deadline	Interim and Final Effluent Limitations	
	Annual Load Total Phosphorus (kg)	Annual Load Total Nitrogen (TKN+NO ₃ -N+NO ₂ -N) (kg)
March 11, 2014	887	1739
September 11, 2018	71	710

- ii. The City of Torrance submitted a special study work plan, which was approved by the Regional Water Board Executive Officer, and established the following annual mass-based water quality based effluent limitations:

Deadline	Interim and Final Effluent Limitations	
	Annual Load Total Phosphorus (kg)	Annual Load Total Nitrogen (TKN+NO ₃ -N+NO ₂ -N) (kg)
March 11, 2014	3,760	7,370
September 11, 2018	301	3008

D. Machado Lake Pesticides and PCBs TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-4.
2. Permittees shall comply with the following water quality-based effluent limitations for discharges of suspended sediments to Machado Lake, applied as a 3-year average no later than September 30, 2019:

⁴⁹ The annual mass-based allocation shall be equivalent to a monthly average concentration of 0.1 mg/L total phosphorus and 1.0 mg/L total nitrogen based on approved flow conditions.

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Pollutant	Effluent Limitations for Suspended Sediment-Associated Contaminants (µg/kg dry weight)
Total PCBs	59.8
DDT (all congeners)	4.16
DDE (all congeners)	3.16
DDD (all congeners)	4.88
Total DDT	5.28
Chlordane	3.24
Dieldrin	1.9

E. Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Tables K-4 and K-13.
2. Permittees shall comply with the interim water quality-based effluent limitations listed below, as of the effective date of this Order:
 - a. Permittees shall comply with the following interim water quality-based effluent limitations for discharges to Dominguez Channel freshwater during wet weather:
 - i. The freshwater toxicity interim water quality-based effluent limitation is 2 TUc. The freshwater interim effluent limitation shall be implemented as a trigger requiring initiation and implementation of the TRE/TIE process as outlined in US EPA’s “Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications Under the National Pollutant Discharge Elimination System Program” (2000).
 - ii. Permittees shall comply with the following interim metals water quality-based effluent limitations for discharges to the Dominguez Channel freshwater and Torrance Lateral during wet weather:

Metals	Interim Effluent Limitation Daily Maximum (µg/L)
Total Copper	207.51
Total Lead	122.88
Total Zinc	898.87

- b. Permittees shall comply with the following interim concentration-based water quality-based effluent limitations for pollutant concentrations in the sediment discharged to the Dominguez Channel Estuary and Greater Los Angeles and Long Beach Harbor Waters:

Water Body	Interim Effluent Limitations Daily Maximum (mg/kg sediment)					
	Copper	Lead	Zinc	DDT	PAHs	PCBs
	Dominguez Channel Estuary	220.0	510.0	789.0	1.727	31.60

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(below Vermont Avenue)						
Long Beach Inner Harbor	142.3	50.4	240.6	0.070	4.58	0.060
Los Angeles Inner Harbor	154.1	145.5	362.0	0.341	90.30	2.107
Long Beach Outer Harbor (inside breakwater)	67.3	46.7	150	0.075	4.022	0.248
Los Angeles Outer Harbor (inside breakwater)	104.1	46.7	150	0.097	4.022	0.310
Los Angeles River Estuary	53.0	46.7	183.5	0.254	4.36	0.683
San Pedro Bay Near/Off Shore Zones	76.9	66.6	263.1	0.057	4.022	0.193
Los Angeles Harbor - Cabrillo Marina	367.6	72.6	281.8	0.186	36.12	0.199
Los Angeles Harbor - Consolidated Slip	1470.0	1100.0	1705.0	1.724	386.00	1.920
Los Angeles Harbor - Inner Cabrillo Beach Area	129.7	46.7	163.1	0.145	4.022	0.033
Fish Harbor	558.6	116.5	430.5	40.5	2102.7	36.6

3. Permittees shall comply with the final water quality-based effluent limitations as listed below no later than March 23, 2032, and every year thereafter:

a. Dominguez Channel Freshwater – Wet Weather

- i. Freshwater Toxicity Effluent Limitation shall not exceed the monthly median of 1 Tuc.
- ii. Permittees shall comply with the following final metals water quality-based effluent limitations for discharges to Dominguez Channel and all upstream reaches and tributaries of Dominguez Channel above Vermont Avenue:

Metals	Water Column Mass-Based Final Effluent Limitation Daily Maximum ⁵⁰ (g/day)
Total Copper	1,300.3
Total Lead	5,733.7
Total Zinc	9,355.5

b. Torrance Lateral Freshwater and Sediment – Wet Weather

- i. Permittees shall comply with the following final metals water quality-based effluent limitations for discharges to the Torrance Lateral:

Metals	Water Column Effluent Limitation Daily Maximum ⁵¹ (unfiltered, µg/L)
Total Copper	9.7

⁵⁰ Effluent limitations are based on a hardness of 50 mg/L, and 90th percentile of annual flow rates (62.7 cfs) in Dominguez Channel. Recalculated mass-based effluent limitations using ambient hardness and flow rate at the time of sampling are consistent with the assumptions and requirements of the TMDL. In addition to the effluent limitations above, samples collected during flow conditions less than the 90th percentile of annual flow rates must demonstrate that the acute and chronic hardness dependent water quality criteria provided in the California Toxics Rule (CTR) are achieved.

⁵¹ Effluent limitations are based on a hardness of 50 mg/L. Recalculated concentration-based effluent limitations using ambient hardness at the time of sampling are consistent with the assumptions and requirements of the TMDL. In addition to the effluent limitations above, samples collected during flow conditions less than the 90th percentile of annual flow rates must demonstrate that the acute and chronic hardness dependent water quality criteria provided in the CTR are achieved.

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Total Lead	42.7
Total Zinc	69.7

- ii. Permittees shall comply with the following final concentration-based water quality-based effluent limitations for pollutant concentrations in the sediment discharged to the Torrance Lateral:

Metals	Concentration-Based Effluent Limitation Daily Maximum (mg/kg dry)
Total Copper	31.6
Total Lead	35.8
Total Zinc	121

- c. Dominguez Channel Estuary and Greater Los Angeles and Long Beach Harbor Waters

- i. Permittees shall comply with the following final mass-based water quality-based effluent limitations, expressed as an annual loading of pollutants in the sediment deposited to Dominguez Channel Estuary, Los Angeles River Estuary, and the Greater Los Angeles and Long Beach Harbor Waters:

Water Body	Final Effluent Limitations Annual (kg/yr)			
	Total Cu	Total Pb	Total Zn	Total PAHs
Dominguez Channel Estuary	22.4	54.2	271.8	0.134
Consolidated Slip	2.73	3.63	28.7	0.0058
Inner Harbor	1.7	34.0	115.9	0.088
Outer Harbor	0.91	26.1	81.5	0.105
Fish Harbor (POLA)	0.00017	0.54	1.62	0.007
Cabrillo Marina (POLA)	0.0196	0.289	0.74	0.00016
San Pedro Bay	20.3	54.7	213.1	1.76
LA River Estuary	35.3	65.7	242.0	2.31

- ii. Permittees shall comply with the following final concentration-based water quality-based effluent limitations for pollutant concentrations in the sediments discharged to the Dominguez Channel Estuary, Consolidated Slip, and Fish Harbor:

Water Body	Effluent Limitations Daily Maximum (mg/kg dry sediment)		
	Cadmium	Chromium	Mercury
Dominguez Channel Estuary	1.2	--	--
Consolidated Slip	1.2	81	0.15
Fish Harbor	--	--	0.15

- d. Permittees shall comply with the following final mass-based water quality-based effluent limitations, expressed as an annual loading of total DDT and total PCBs

in the sediment deposited to Dominguez Channel Estuary, Los Angeles River Estuary, and the Greater Los Angeles and Long Beach Harbor Waters:

Water Body	Final Effluent Limitations Annual (g/yr)	
	DDT total	PCBs total
Dominguez Channel Estuary	0.250	0.207
Consolidated Slip	0.009	0.004
Inner Harbor	0.051	0.059
Outer Harbor	0.005	0.020
Fish Harbor	0.0003	0.0019
Cabrillo Marina	0.000028	0.000025
Inner Cabrillo Beach	0.0001	0.0003
San Pedro Bay	0.049	0.44
LA River Estuary	0.100	0.324

4. Compliance Determination

- a. Permittees shall be deemed in compliance with the interim concentration-based water quality-based effluent limitations for pollutant concentrations in the sediment as listed above in part E.2.b by meeting any one of the following methods:
 - i. Demonstrate that the sediment quality condition of *Unimpacted* or *Likely Unimpacted* via the interpretation and integration of multiple lines of evidence as defined in the Sediment Quality Objectives (SQO) Part 1, is met; or
 - ii. Meet the interim water quality-based effluent limitations in bed sediment over a three-year averaging period; or
 - iii. Meet the interim water quality-based effluent limitations in the discharge over a three-year averaging period.
- b. Permittees shall be deemed in compliance with the final fresh water metals water quality-based effluent limitations for discharges to Dominguez Channel and Torrance Lateral as listed above in parts E.3.a.ii and E.3.b.i by meeting any one of the following methods:
 - i. Final metals water quality-based effluent limitations are met; or
 - ii. CTR total metals criteria are met instream; or
 - iii. CTR total metals criteria are met in the discharge.
- c. Permittees shall be deemed in compliance with the final water quality-based effluent limitations for pollutants in the sediment as listed above in parts E.3.c.i and E.3.c.ii by meeting any one of the following methods:
 - i. Final water quality-based effluent limitations for pollutants in the sediment are met; or

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- ii. The qualitative sediment condition of *Unimpacted* or *Likely Unimpacted* via the interpretation and integration of multiple lines of evidence as defined in the SQO Part 1, is met, with the exception of chromium, which is not included in the SQO Part 1; or
 - iii. Sediment numeric targets are met in bed sediments over a three-year averaging period.
 - d. Permittees shall be deemed in compliance with the final water quality-based effluent limitations for total DDT and total PCBs in the sediment as listed above in part E.3.d by meeting any one of the following methods:
 - i. Fish tissue targets are met in species resident to the specified water bodies⁵²; or
 - ii. Final water quality-based effluent limitations for pollutants in the sediment are met; or
 - iii. Sediment numeric targets to protect fish tissue are met in bed sediments over a three-year averaging period; or
 - iv. Demonstrate that the sediment quality condition protective of fish tissue is achieved per the State Water Board’s Statewide Enclosed Bays and Estuaries Plan.

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⁵² A site-specific study to determine resident species shall be submitted to the Regional Water Board Executive Officer for approval.

**ATTACHMENT R. TMDLs IN THE MIDDLE SANTA ANA RIVER WATERSHED
MANAGEMENT AREA (SANTA ANA REGION TMDL)****A. Middle Santa Ana River Watershed Bacterial Indicator TMDLs**

1. Permittees subject to the provisions below are identified in Attachment K, Table K-8.
2. Permittees shall comply with the following final water quality-based effluent limitations for discharges to San Antonio Creek and Chino Creek during dry weather no later than December 31, 2015, and during wet weather no later than December 31, 2025:
 - a. Fecal coliform⁷⁷: geometric mean less than 180 organisms/100 mL based on five or more samples during any 30-day period, and not more than 10% of the samples exceed 360 organisms/100 mL during any 30-day period.
 - b. *E. coli*: geometric mean less than 113 organisms/100 mL based on five or more samples during any 30-day period, and not more than 10% of the samples exceed 212 organisms/100 mL during any 30-day period.
3. Permittees shall comply with the following receiving water limitations for discharges to San Antonio Creek and Chino Creek during dry weather no later than December 31, 2015, and during wet weather no later than December 31, 2025:
 - a. Fecal coliform⁷⁸: geometric mean less than 200 organisms/100 mL based on 5 samples during any 30-day period, and not more than 10% of the samples exceed 400 organisms/100 mL during any 30-day period.
 - b. *E. coli*: geometric mean less than 126 organisms/100 mL based on 5 samples during any 30-day period, and not more than 10% of the samples exceed 235 organisms/100 mL during any 30-day period.

B. Section A of this Attachment R, and Parts V and VI.C of this Order, shall not be applicable to discharges of bacteria through MS4s of the Permittees identified in Attachment K, Table K-8, to receiving waters within the Middle Santa Ana River Watershed that are addressed by the Middle Santa Ana River Watershed Bacterial Indication TMDLs, Resolution No. R8-2005-0001, established by the Regional Water Quality Control Board, Santa Ana Region (Santa Ana Regional Board), during the effective dates of any NPDES permit that is issued by the Santa Ana Regional Board:

1. ~~Is issued by the Regional Water Quality Control Board, Santa Ana Region,~~ pursuant to a valid and enforceable designation agreement between this Regional Water Board and the Santa Ana Regional Board under Water Code section 13228, that is applicable to MS4 discharges by the Permittees identified in Attachment K, Table K-8; and
2. The designation agreement delegates the Santa Ana Regional Board as the regulator of MS4 ~~of~~ discharges by the Permittees identified in Attachment K, Table

⁷⁷ The fecal coliform water quality-based effluent limitations become ineffective upon the replacement of the REC-1 fecal coliform water quality objectives with REC-1 *E. coli* water quality objectives in the Santa Ana Region Basin Plan.

⁷⁸ The fecal coliform receiving water limitations become ineffective upon the replacement of the REC-1 fecal coliform water quality objectives with REC-1 *E. coli* water quality objectives in the Santa Ana Region Basin Plan.

Los Angeles County
Municipal Separate Storm Sewer System

ORDER NO. R4-2012-XXXX
NPDES NO. CAS004001

K-8, to ensure compliance with the Middle Santa Ana River Watershed Bacterial Indicator TMDLs, Resolution No. R8-2005-0001, in satisfaction of the requirements of 40 CFR section 122.44(d)(1)(vii)(B).

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EDMUND G. BROWN JR.
GOVERNORMATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Los Angeles Regional Water Quality Control Board

TO: Parties and Interested Persons

FROM: Maria Mehranian, Chair 
LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD

DATE: November 6, 2012

SUBJECT: ORDER OF PROCEEDINGS FOR THE PUBLIC HEARING ON THE LOS
 TENTATIVE ANGELES COUNTY MS4 PERMIT ON NOVEMBER 8, 2012

On November 8, 2012, the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) will continue the public hearing on and consider adoption of a tentative National Pollutant Discharge Elimination System (NPDES) Permit for Municipal Separate Storm Sewer System (MS4) discharges within the Coastal Watersheds of Los Angeles County, with the exception of discharges originating from the City of Long Beach, NPDES No. CAS004001. A Revised Tentative Order was circulated on October 18, 2012, and included revisions that were made as a result of written and oral comments received by the Los Angeles Water Board, including oral comments made during the public hearing held on October 4-5, 2012. On November 5, 2012, Los Angeles Water Board staff circulated a Second Revised Tentative Order reflecting proposed additional changes to the Revised Tentative Order for the Board's consideration on November 8, 2012.

During the hearing, Los Angeles Water Board staff will provide an overview of the key revisions made to the tentative order released for public comment on June 6, 2012. Parties and the public (also called "Interested Persons") will have the opportunity to address the Board on the Revised Tentative Order as provided in the Notice of Opportunity for Public Comment and Notice of Adoption Meeting dated October 18, 2012 (hereinafter, the "Notice"). The Board will accept oral comments only with respect to the revisions made to the tentative order released for public comment on June 6, 2012, as reflected in track changes format in the Revised Tentative Order circulated on October 18, 2012 and the Second Revised Tentative Order circulated on November 5, 2012. Oral comments regarding provisions that remain unchanged from the tentative order released for public comment on June 6, 2012 will not be accepted. No new written materials may be submitted. Parties and the public should present all oral comments and evidence during the hearing that they would like the Board to consider. If any person uses a PowerPoint presentation, they must leave a copy with the Board for inclusion in the administrative record. Parties and members of the public with similar concerns or opinions are encouraged to choose one representative to speak, and are encouraged to coordinate their presentations with each other and to summarize their written comments. Repetitive comments will not be allowed. Once oral comments are completed, the Board will then have an opportunity to ask questions of Board staff, parties, and the public, and then deliberate. The Board is expected to take action on November 8, 2012.

Pursuant to Section III of the Notice, the Los Angeles Water Board received requests from several parties and/or interested persons requesting extra time to present their oral comments at the hearing. After consideration of all requests, taking into account that oral comments are limited to

MARIA MEHRANIAN, CHAIR | SAMUEL UNGER, EXECUTIVE OFFICER

320 West 4th St., Suite 200, Los Angeles, CA 90013 | www.waterboards.ca.gov/losangeles

revisions made since June 6, 2012, that the revisions were made in response to oral and written comments, the complexity and number of issues under consideration, the extent to which the parties have coordinated, the number of parties and members of the public, the opportunity to submit written comments that are part of the administrative record, the extent to which the parties have identified unique interests, the time available for the hearing, and to allow the Board ample time to ask question and deliberate, the following Order of Proceedings, including time allocated to each party and member of the public, will be employed at the hearing on November 8, 2012, unless the Board makes a modification for cause. Parties to this proceeding are hereby advised that their allocated time includes any opening statement, main presentation, rebuttal and/or cross-examination, and closing statement. Questions from the Board and the time to answer them will not be charged against the parties' allocated time.

Oral comments from parties that did not request extra time and members of the public are limited to 2 minutes each. However, the Board may reduce the time for each member of the public to comment depending on the number of persons wishing to be heard and the available time for the hearing.

ORDER OF PROCEEDINGS

1)	Opening statement by Chair, introductory items, and administration of oath to persons who intend to testify	Approx. 10 minutes
2)	Los Angeles Water Board Staff Presentation	Approx. 1 hour
3)	Elected Officials' Policy Statements	3 minutes maximum each
4)	U.S. Environmental Protection Agency	Approx. 10 minutes
5)	Designated Parties' Presentations	
	A. LA Permit Group (on behalf of 62 designated parties) ¹	30 minutes maximum
	B. City of Malibu	8 minutes maximum
	C. Ray Tahir – representing the Cities of Baldwin Park, Claremont, Duarte, Irwindale, Lawndale, Lomita, Carson, Pico Rivera, Compton, South El Monte, El Monte, West Covina, San Fernando, San Dimas, Gardena, and Glendora	15 minutes maximum
	D. City of Signal Hill	10 minutes maximum
	E. Cities of Redondo Beach, Manhattan Beach, Hermosa Beach, and Torrance	10 minutes maximum
	F. Heal the Bay, NRDC, and LA Waterkeeper	40 minutes maximum
	G. Los Angeles County and Los Angeles County Flood Control District	30 minutes maximum
	H. City of Los Angeles	15 minutes maximum
	I. All other parties not identified above	2 minutes maximum each
6)	Public/Interested Persons' Comments	2 minutes maximum each
	A. Building Industry Association of Southern California/ Construction Industry Coalition on Water Quality	8 minutes maximum
7)	Board Questions, Deliberations, and Vote	Unlimited

¹ As noted in the Order on Objections and Requests Concerning Hearing Procedures and Process dated September 26, 2012, LA Permit Group is not a party to this proceeding. Rather, LA Permit Group will be making a joint presentation on behalf of 62 designated parties to this proceeding.

LYRIS MAILING

RB-AR20933

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ENVIRONMENTAL PROTECTION

Los Angeles Regional Water Quality Control Board

**ORDER ON OBJECTIONS REGARDING REVISED TENTATIVE ORDER
AND RESPONSES TO COMMENTS**

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT
FOR MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) DISCHARGES
WITHIN THE COASTAL WATERSHEDS OF LOS ANGELES COUNTY,
WITH THE EXCEPTION OF DISCHARGES ORIGINATING FROM
THE CITY OF LONG BEACH
(NPDES PERMIT NO. CAS004001)**

On June 6, 2012, staff of the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board or Board) circulated a Tentative NPDES Permit for MS4 Discharges within the Coastal Watersheds of Los Angeles County, with the Exception of Discharges originating from the City of Long Beach (Tentative Order and Los Angeles County MS4 Permit, respectively). The written comment period on the Tentative Order closed at noon on July 23, 2012. The Board received hundreds of pages of written comments from permittees, interest groups, government agencies, academia, and individuals.

On October 4 and 5, 2012, the Board held the initial portion of the public hearing. The Board received information from its staff, and oral comments from parties and interested persons, regarding the Tentative Order.

On October 18, 2012, Board staff circulated a Revised Tentative Order that included revisions to the Tentative Order as a result of the written and oral comments received by the Board. Between October 23-26, 2012, Board staff circulated responses to the significant written comments received by the Board. And on November 5, 2012, Board staff circulated a Second Revised Tentative Order that included additional changes to the Revised Tentative Order released on October 18, 2012.

The Board received a letter dated October 29, 2012, from Mr. Ray Tahir of TECS Environmental Compliance Services on behalf of his clients.¹ The letter raises substantive and procedural objections to the Revised Tentative Order and responses to comments. The Chair, having reviewed the objections, rules as follows:

Objection:

Mr. Tahir raises the following procedural objections:

- (1) The Revised Tentative Order adds new language that constitutes a significant change and, therefore, merits a new 45 day review and comment period; and

¹ Mr. Tahir identifies the following cities as his clients: Baldwin Park, Carson, Compton, Claremont, Duarte, El Monte, Gardena, Glendora, Irwindale, Lawndale, Lomita, Pico Rivera, San Gabriel, San Dimas, South El Monte, Pico Rivera, and West Covina.

- (2) The Revised Tentative Order does not contain revisions and answers to questions in response to written comments on the Tentative Order released on June 6, 2012 that were submitted to the Board on or before July 23, 2012.

Mr. Tahir also provides substantial written comments on the substance of the Revised Tentative Order.

Ruling:

For the reasons set forth below, the procedural objections are OVERRULED.

Regarding Mr. Tahir's substantive comments, as noted in the Notice of Opportunity for Public Comment and Notice of Adoption Meeting dated October 18, 2012, the Los Angeles Water Board is not accepting additional written comments on the Revised Tentative Order. Accordingly, Mr. Tahir's substantive written comments are untimely and will not be included in the administrative record.² However, Mr. Tahir may orally comment on revisions to the Tentative Order at the public hearing on November 8, 2012.

- 1) *Claim that the Revised Tentative Order represents a significant change that merits a new review and comment period*

The revisions to the Tentative Order do not rise to the level of significance that require a new notice and comment period. The revisions were made in direct response to written and oral comments received by the Board and concern matters that the parties and interested persons knew to be at issue.

Both state and federal law require a notice and comment period prior to the adoption of an NPDES permit. California Water Code section 13167.5 prescribes a notice and public comment period of at least thirty days prior to the adoption of waste discharge requirements, including NPDES permits. The section explicitly states, however, that it does not require the regional board "to provide more than one notice or more than one public comment period prior to the adoption of waste discharge requirements" State law therefore does not require a new notice and comment period.

Federal regulations promulgated pursuant to the Clean Water Act also require a thirty day public comment period on draft NPDES permits. As stated in section 124.10(b) of title 40 of the Code of Federal Regulations (40 C.F.R.), "public notice of the preparation of a draft permit ... shall allow at least 30 days for public comment." Nowhere do the regulations suggest that revisions to a draft permit, however significant, require an additional public comment period. In fact, 40 C.F.R. section 124.14(b) grants discretion to the EPA Regional Administrator to either "reopen or extend the comment period," "prepare a new draft permit, appropriately modified," or both – "if any data information or arguments submitted during the public comment period ... appear to raise substantial new questions concerning a permit." Although not directly controlling on the States' authority, section 124.14 illustrates that the decision to reopen the comment period is discretionary, even if the comments raise substantial new questions concerning the permit.

² Mr. Tahir also states that the lack of review time for the Revised Tentative Order released on October 23 is unjustifiably short and that comments were required to be submitted by October 29. The Board first notes that the Revised Tentative Order was released on October 18, and not October 23. Further, the Board did not allow written comments on the Revised Tentative Order. It is therefore unclear why Mr. Tahir believes the Board imposed a deadline of October 29 for written comments.

Though the comments may trigger the permit drafters to modify the permit, as was the case here, a new comment period is permissible but not required. (See, e.g., *In re Dominion Energy Brayton Point, L.L.C.* (Feb. 1, 2006) NPDES Appeal 03-12, 2006 WL 3361084.)

In the context of administrative rulemaking, revisions to a proposed rule only require a new comment period if the modifications are not the “logical outgrowth” of the rule as it was initially proposed. (*NRDC v. USEPA* (9th Cir. 2002) 279 F.3d 1180, 1186-1188.) Even a substantial variation does not necessitate a new comment period so long as the final regulation is “in character with the original proposal.” (*Id.*, quoting *Hodge v. Dalton* (9th Cir. 1997) 107 F.3d 705, 712.) Analogously, in the context of a permit proceeding, a new comment period is only required if the revised permit is essentially a *new* draft permit because the revisions are not the “logical outgrowth of” or “in character with” the permit as initially proposed. Here, the revisions to the Tentative Order are the direct consequence of the written and oral comments received. As reflected by the tracked changes, the revisions to the Tentative Order discretely address particular comments and do not fundamentally alter the character of the Tentative Order.

The purpose of the notice and comment requirements is not to lead to the absurd result that agency proceedings are subject to a new round of comments with every substantive revision. Rather, the public has a one-time right to comment on the issues raised by the tentative permit. One of the purposes of the comment period is to provide the agency with additional information upon which it may choose to revise the draft language. Where the character and issues raised by the tentative permit remain the same, however, and as is true here, there is no additional right to comment on those revisions. (See *Rybachek v. EPA*, (9th Cir. 1990) 904 F.2d 1276, 1286.)

The parties and interested persons will have an opportunity to comment on the revisions to the Tentative Order during the second portion of the hearing to be held on November 8, 2012. At that time, commenters will have an opportunity to orally address the Board with concerns or other comments regarding the revisions.

2) *Claim that responses to comments are inadequate*

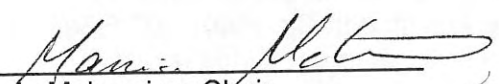
Federal regulations require that response to comments shall: (1) specify which provisions of the draft permit have been changed in the final permit decision, and the reasons for the change; and (2) briefly describe and respond to all significant comments on the draft permit raised during the public comment period. (40 C.F.R. § 124.17(a).) The responses to comments circulated by Board staff between October 23-26, 2012 provided responses to the significant written comments received on the Tentative Order during the public comment period. The responses to comments also specified which provisions were changed and why. Contrary to Mr. Tahir's assertion, Board staff adequately responded to the significant comments received. Further, the revisions to the Tentative Order made since June 6, 2012 are shown in the Revised Tentative Order circulated on October 18, 2012 and the Second Revised Tentative Order circulated on November 5, 2012, in track changes format to assist the public in identifying the revisions. The revisions were made by the Board's staff in response to written and oral comments received by the Board.

Mr. Tahir also provides a list of particular comments to which he believes were not responded to or the responses are not adequate. The Board's staff concluded that many of the comments noted by Mr. Tahir did not merit revisions to the Tentative Order. The responses to comments do, however, respond to each of the significant written comments that were received by the

Board by the submittal deadline of July 23, 2012, whether or not those comments resulted in a revision to the Tentative Order.

Board staff is directed to provide notice of this Order to all parties and interested persons.

IT IS SO ORDERED.



Maria Mehranian, Chair

11 / 7 / 2012
Date

LYRIS MAILING

RB-AR20950

LIST NAME:

MSY LA County

DATE MAILED:

11-7-12

DATEJOINED_	EMAILADDR_	FULLNAME_
2/2/2011 12:04	ADRIEN236@VLPRODUCE.COM	ADRIEN F. MADDALENO
6/22/2010 11:57	AEMiller@waterboards.ca.gov	Alan E. Miller
3/27/2012 13:25	Berry.Ueoka@EverestConsultants.com	Berry Ueoka
3/22/2012 15:22	BryantA@lwa.com	Bryant Alvarado
11/15/2010 7:46	CaliforniaWaterTechnologies@gmail.com	Carlos Aguilar
7/6/2009 13:38	City_manager@ci.glendora.ca.us	Chris Jeffers
11/16/2011 7:58	DLiu@DiamondBarCA.Gov	David G. Liu
6/11/2011 22:09	Daniel.Lee@Arcadis-us.com	Daniel K. Lee
2/22/2010 18:03	Dave@Bubalo.com	Dave Sorem
5/2/2011 6:54	Debbie.Neev@gmail.com	Deborah Neev
7/6/2009 13:58	EKiepke@WILLDAN.com	E. Kiepke
7/6/2009 13:21	FredLatham@santafesprings.org	Frederick W. Latham
6/12/2012 11:32	Fresh@freshcreek.com	wallytrnka
10/5/2010 11:14	Gerhardt.Hubner@ventura.org	Gerhardt Hubner
3/22/2010 15:01	Hamid.Tadayon@lacity.org	Hamid Tadayon
7/6/2009 13:07	James.Destefano@ci.diamond-bar.ca.us	James DeStefano
1/19/2010 11:06	Jeremy.Bock@Kiewit.com	Jeremy Bock
3/7/2012 16:27	Jim@CuratingLA.com	Jim Gilbert
7/6/2009 13:35	John.Beshay@westcovina.org	John Beshay
7/28/2011 16:10	Joyntventr@aol.com	Jayne Staley
8/29/2011 14:09	Julie_Carver@ci.pomona.ca.us	Julie Carver
7/6/2009 13:53	Kaden.Young@culvercity.org	Kaden Young
11/16/2011 8:45	LLanger@localgovlaw.com	Lauren Langer
4/5/2011 9:34	Leroy.Richards@msh.dmh.ca.gov	LeRoy Richards
8/25/2010 13:32	Lynn@MLMENG.com	Lynn Kubasek
11/16/2011 8:39	NOENEGRETE@SANTAFESPRINGS.ORG	Noe Negrete
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12/29/2011 11:05	Ppeuron@forestlawn.com	Peter Peuron
11/16/2011 8:43	RYee@DiamondBarCA.Gov	Rick Yee
10/22/2010 15:23	Ramon@calfran.net	Ramon Wagner
7/6/2009 13:51	Rhughes@WILLDAN.com	Roxanne Hughes
4/25/2011 15:19	Robert.Vega@lacity.org	Robert Vega
7/6/2009 11:32	Sandra.Kelley@waterboards.ca.gov	Sandra Kelley
7/6/2009 13:23	Shannon.Yauchzee@westcovina.org	Shannon Yauchzee
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