September 14, 2012

Via e-mail to lwalsh@waterboards.ca.gov
San Diego Regional Water Quality Control Board
9174 Sky Park Court, Suite 100
San Diego, CA 92123-4340

RE: Comments from Environmental Groups on Tentative Order Number: R9-2012-0011

Dear Ms. Walsh:

San Diego Coastkeeper, Orange County Coastkeeper, Inland Empire Waterkeeper, Surfrider Foundation—San Diego Chapter, Surfrider Foundation—South Orange County Chapter, Environmental Health Coalition, Preserve Wild Santee, Friends of Rose Canyon, Coastal Environmental Rights Foundation, Laguna Bluebelt Coalition, South Laguna Civic Association, and Save Hobo Aliso (the "Environmental Groups") respectfully submit the following comments on the administrative draft of the San Diego Regional Municipal Separate Storm Sewer System permit, Tentative Order No. R9-2012-0011 ("Administrative Draft Permit").

EXECUTIVE SUMMARY

The Environmental Groups appreciate the opportunity to provide exhaustive comments on the pre-public notice draft of the San Diego Region's municipal stormwater permit. The focused meeting approach has provided the Environmental Groups an opportunity to work collaboratively with Regional Board staff, Copermittees, and other stakeholder groups. While the Administrative Draft

Permit is step in the right direction, there are several areas of concern remaining. Moreover, these concerns are not necessarily the same throughout the region. The priority issues list below is meant to assist the Regional Board staff in identifying the highest priority issues for environmentalists in each county.

SAN DIEGO COUNTY PRIORITY ISSUES:

1. The adaptive management process should not provide a safe harbor for enforcement action where discharges from the MS4 cause or contribute to violation of receiving water standards. (§ II.)
2. The Permit should demand water quality improvements within the permit term. (§II.)
3. The public should be included in developing Water Quality Improvement Plans and adaptive management. (§ V.B.)
4. Each Copermittee should be accountable for meeting watershed goals. (§V.F. at 14)
5. The Permit should require aggressive action to effectively prohibit non-stormwater discharges, particularly from overwatering, car washing, and swimming pool discharges. (§ III.)
6. The Permit should encourage collaboration between Copermittees and stakeholders. (§§ V.B, VI.C, VI.J.)

ORANGE COUNTY PRIORITY ISSUES:

1. The Permit should promote regular inspections of inventoried existing development to ensure compliance with applicable local ordinances and permits. (§ L.)
2. The Administrative Draft Permit fails to property incorporate adopted Total Maximum Daily Loads. (§ IV.)
3. The adaptive management process should not provide a safe harbor for enforcement action where discharges from the MS4 cause or contribute to violation of receiving water standards. (§ II.)

RIVERSIDE COUNTY PRORITIY ISSUES:

1. The Administrative Draft Permit fails to property incorporate adopted Total Maximum Daily Loads. (§ IV.)
2. The Regional Clearinghouse could become an important tool to increase transparency. (§ X.C.)

BACKGROUND

Southern California's unique, breathtaking beaches are one of the area's main attractions, with tourism contributing to approximately 75% of California's ocean-related jobs. The San Diego tourism industry is the third largest industry in the county, and is critical to the region's economy supporting businesses and jobs.[1] Hosting more than 31 million visitors each year, the industry employs over 160,000 San Diegans directly and indirectly and generates an economic impact of over $17 billion new dollars generated for the regional economy and hundreds of millions in statute and local taxes each year.[2]

[1] *See* http://www.sandiego.org/industry-research.aspx.
[2] *See* http://www.sandiego.org/industry-research.aspx.

Southern California's ocean-based tourism economy hinges on people being able to access the water. But polluted runoff keeps people out of the water and off the beaches for at least 72 hours after a rain event. Even in dry weather, recreational beach users are told to avoid runoff discharge locations by at least 75 feet. People ignoring these warnings often get sick. To safeguard our region's tourism economy and keep people healthy, the San Diego Regional Water Quality Control Board ("Regional Board") must adopt stringent requirements in this permit.

The current draft permit is unique in California in that it abandons the county-by-county permitting process and proposes a regional MS4 permit covering three counties. That being said, the draft permit undoubtedly addresses pollution and runoff concerns more progressively than any previous permit to date keeping in mind that it should implement the goals of the Clean Water Act to "restore and maintain the chemical, physical and biological integrity of the nation's waters" by "eliminating the discharges of pollutants by 1985, and to enhance water quality nationally to a 'fishable/swimmable' level by 1983." (33 U.S.C. § 1251(a)(1-2)(2012).

We have failed to achieve the Clean Water Act's goals in the San Diego Region. To achieve the Clean Water Act's goals, we must recognize the effects storm water runoff has on our shores and waterways. Twenty seven years after we should have eliminated pollutant discharges, beaches are still being closed after rainfalls because the water is too contaminated for us to safely swim. This is simply unacceptable. In a community that relies on tourism, in a time of economic hardship, in an area growing exponentially, the San Diego region must re-evaluate our its interests and implement measures strong enough to protect what is arguably our single greatest asset.

COMMENTS

I. An Expanded Regional MS4 Permit is both Legal and Appropriate.

A. The Regional Board Has Legal Authority to Issue a Regional Permit.

The Regional Board has the legal authority to issue an expanded region-wide permit.[3] The legislature directed regional boards to "coordinate their respective activities so as to achieve a unified and effective water quality control program."[4] In order to achieve this, the Regional Board has the authority to "formulate and adopt water quality control plans for all areas within the region."[5] Most importantly, the statutory language assumes Regional Boards may enact plans which include multiple counties; "regional boards shall not adopt any water quality control plan unless a public hearing is first held…in the affected county or ***counties***."[6] The Regional Board has the statutory authority to use a regional permit instead of county specific permits.

[3] *See* Cal. Water Code §§ 13000, 13001, 13140, 13240, 13370, 13377.
[4] Cal. Water Code § 13001.
[5] Cal. Water Code § 13040.
[6] *See* Cal. Water Code § 13244 (emphasis added).

B. The Regional Board Should Issue a Regional Permit.

The Regional Board has taken an important step in bringing together the permits for all three of the counties under the jurisdiction of Region 9. Having all of Region 9 governed by one MS4 permit promotes efficiency and consistency, allowing Regional Board staff the opportunity to focus on compliance and enforcement issues. As staff would have more time to work with Copermittees on specific compliance issues, the region would likely benefit with improved water quality. Further, uniform requirements across all of Region 9 will clarify expectations regarding work plans and budget allocations, and encourage watershed-based cooperation to address water quality problems.

II. THE ADMINISTRATIVE DRAFT PERMIT PROTECTS RECEIVING WATERS.

The Administrative Draft Permit includes receiving water limitations that prohibit discharges from the MS4s from causing or contributing to water quality standard violations.[7] This prohibition is appropriate to achieve Clean Water Act mandates.

While the Administrative Draft Permit directs the Copermittees to strive to improve water quality through the adaptive management process, engaging in adaptive management does not provide Copermittees a "safe harbor" from enforcement action for water quality violations.[8] This approach is appropriate and complies with the Clean Water Act.[9]

However, the Administrative Draft Permit fails to aggressively seek water quality improvements. Indeed, the Administrative Draft Permit suggests that, because water quality degradation in the San Diego region occurred over several decades, "a decade or more may be necessary to realize demonstrable improvement to the quality of waters in the Region."[10]

Our region deserves better. Just because it may be difficult to see water quality improvements does not mean that we cannot and should not demand aggressive action to see water quality improvements for at least some pollutants in some portions of our watersheds. Region 9 had 274 water body segments on the 2008 303(d) list for some type of pollution—156 of these requiring a TMDL. If you count the impairment per pollutant for each water body, the number of listed segments skyrockets from 274 to 1570.[11]

The Permit should not bow to Copermittee pessimism that measurable water quality improvements will take decades to achieve. Instead, the Permit should demand that we significant water quality improvement within the permit term.

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[7] *See* Tentative Order No. R9-2012-0011 §II.A.2 at 9.
[8] *See* Tentative Order No. R9-2012-0011 § II.A.4.(c) at 12.
[9] The Clean Water Act regulations specify that permit-holders have a duty to "comply with all conditions of th[e] permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application." 40 C.F.R. § 122.41(a).
[10] *See* Tentative Order No. R9-2012-0011 § I. at 4.
[11] *See* http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/303dlist.shtml.

III. THE ADMINISTRATIVE DRAFT PERMIT'S TOUGH STANCE ON NON-STORMWATER DISCHARGES IS APPROPRIATE.

A. The Administrative Draft Permit Properly Tightened Non-Storm Water Exemptions.

The Administrative Draft Permit takes an important step by ratcheting down exemptions for non-storm water discharges. The Clean Water Act requires that municipal stormwater permits "shall include a requirement to effectively prohibit non-stormwater discharges into the storm sewers."[12] The Administrative Draft Permit fulfills this requirement by prohibiting non-stormwater discharges into the MS4 unless they are "authorized by a separate NPDES permit" or the discharge falls within a category of non-stormwater discharges that must be addressed under the permit's illicit discharge detection and elimination provisions.[13] This wording meets the Clean Water Act requirements of "effectively prohibiting" non-stormwater discharges while providing clarity regarding how a Copermittee can meet the "effectively prohibit" standard.[14]

This more specific language is necessary because the Copermittees have done a poor job "effectively prohibiting" non-stormwater discharges under the current permit language.[15] Non-stormwater discharges are rampant throughout the region and municipalities have failed to take reasonable steps to effectively prohibit non-stormwater discharges. The Administrative Draft Permit's language prohibiting non-stormwater discharges except in limited situations emphasizes the importance of eliminating non-stormwater discharges and forces the Copermittees to take real action to effectively prohibit non-stormwater discharges. The Environmental Groups urge the Regional Board to leave the Administrative Draft Permit language prohibiting non-stormwater discharges

B. The Administrative Draft Permit Properly Prohibits Non-Stormwater Discharges that are Easily Preventable or Likely to be A Significant Source of Pollutants to Receiving Waters.

The Administrative Draft Permit properly prohibits discharges of pumped ground water, discharges from fountain drains, water from crawl space pumps, and water from footing drains.[16] Likewise, the Administrative Draft Permit properly prohibits water line flushing and water main breaks.[17] While the Administrative Draft Permit does not specifically address landscape irrigation, it has removed the non-stormwater exemption included in the current MS4 permit. These prohibitions are appropriate because they are discharges that can be controlled relatively easily and are likely to be significant sources of pollutants. These provisions therefore meet the Clean Water Act requirements that municipalities effectively prohibit non-stormwater discharges.

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[12] 33 U.S.C. § 1342(p)(3)(B)(ii).
[13] *See* Tentative Order No. R9-2012-0011 § II.A.1(b) at 9.
[14] 33 U.S.C. § 1342(p)(3)(B)(ii).
[15] 33 U.S.C. § 1342(p)(3)(B)(ii).
[16] *See* Tentative Order No. R9-2012-0011 § II.E.2(a)(1) at 56.
[17] *See* Tentative Order No. R9-2012-0011 § II.E.2(a)(2) at 56.

C. The Permit Should Not Allow Non-Stormwater Discharges into San Diego Bay.

The Administrative Draft Permit carves out an exception when it prohibits discharges of pumped ground water, discharges from fountain drains, water from crawl space pumps, and water from footing drains.[18] The Administrative Draft Permit prohibits these non-stormwater discharges, except if those discharges drain to San Diego Bay.[19] The Regional Board has failed to justify why San Diego Bay does not deserve the same protection provided to other surface waters in San Diego, Orange, and Riverside Counties. The Clean Water Act requires the MS4 permit to "effectively prohibit" non-stormwater discharges and does not carve out or sacrifice certain water bodies.[20] The Permit should remove the carve-out allowing pumped groundwater, discharges from foundation drains, water from crawl spaces and water from footing drains to flow unrestricted to San Diego Bay.

D. In Order to Effectively Prohibit Non-Stormwater Discharges, the Copermittees' Legal Authority Must Authorize the Copermittees to Control the Contribution of Pollutants in Discharges of Runoff from Residential and Commercial Properties.

The Administrative Draft Permit requires that Copermittees must establish, maintain, and enforce adequate legal authority to "control the contribution of pollutants in discharges of runoff associated with industrial and construction activity to its MS4…."[21] Residential and commercial properties are also likely causing or contributing to water quality problems throughout the region. Therefore, the Copermittees must likewise establish legal authority to address those problems. Without legal authority to address pollution problems stemming from residential and commercial properties, Copermittees will never be able to address the full range of pollution sources within its jurisdiction.

E. The Permit Should Take a More Aggressive Stance on Vehicle Washing.

The Administrative Draft Permit addresses individual residential vehicle washing as a non-stormwater discharges that "must be controlled… through statute, ordinance, permit, contract, order or similar means."[22] But these "requirements" provide so much flexibility that they are meaningless. To address vehicle washing as a non-stormwater discharge that Copermittees must "effectively prohibit," the Permit must take a more aggressive stance on vehicle washing.

1. <u>The Permit should prohibit wash water from vehicle washing from leaving the residential property.</u>

The Administrative Draft Permit states that wash water from residential vehicle washing must be "directed to landscaped areas or other pervious surfaces where feasible" and that residents should "minimize the use of water for vehicle washing, use as little detergent… as possible, wash vehicles at

[18] *See* Tentative Order No. R9-2012-0011 § II.E.2.a.(2) at 54.
[19] *See id.*
[20] 33 U.S.C. § 1342(p)(3)(B)(ii).
[21] *See* Tentative Order R9-2012-0011 § II.E.1.a.(2) at 54.
[22] *See* Tentative Order R9-2012-0011 § II.E.2.a.(4) at 57.

commercial facilities, and implement other practices of behaviors" to prevent pollutants from residential car washing from entering the stormdrain.[23]

To effectively address residential vehicle washing as a source of non-stormwater discharges, which Copermittees must "effectively prohibit," the Permit should tighten requirements related to residential vehicle washing. The Permit should "effectively prohibit" non-stormwater discharges from residential vehicle washing by prohibiting residents from allowing wash water to leave their property.

2. The Permit should prohibit fundraising or group car washes unless water is directed to landscaped areas or other pervious surfaces.

The Administrative Draft Permit fails to address fundraising or group car washes as a source of non-stormwater discharges. Because of the volume of cars washed within a short time period and the fact that car washes are often held at gas stations or drugstores on a highly-trafficked corner—places with lots of pavement, sources of trash, oil and gas, and a nearby stormdrain—these car washes are sources of problematic non-stormwater discharges. The Permit should require Copermittees to prohibit fundraising or group car washes unless water is directed to landscaped areas or other pervious surfaces.

F. The Permit Should Require All Dechlorinated Swimming Pool Discharges be Directed to the Sanitary Sewer, Landscaped Areas, or Other Pervious Surfaces.

The Administrative Draft Permit allows residents to dump dechlorinated swimming pool discharges to storm drains.[24] This requirement should apply to all pool discharges because of the threat to water quality from extremely large discharges entering storm drains. Unless the discharges directly enter the storm drain, they will gather significant amounts of pollutants along roads, sidewalks, and other impervious surfaces before entering the storm drain. Therefore, the Permit should require all discharges of dechlorinated pool water be directed to the sanitary sewer, landscaped areas, or other pervious surfaces that can handle the volume of water.

G. The Permit Should Require that Exempted Sources of Non-Storm Water be Reduced Whenever Feasible.

The Permit should require that Copermittees take steps to reduce exempted sources of non-storm water when feasible. Even if the exempted category of non-storm waters poses little threat of containing contaminants on its own, all non-storm waters gather additional pollutants as they travel along impervious surfaces to storm drains. Without such a requirement, Copermittees are free to rely on exemptions and do nothing about discharges even when they can be easily prevented. For example, San Diego Coastkeeper recently reported a leaking pipe to the City of San Diego that had been identified by a resident living nearby. In response to the complaint, the City of San Diego reported that, because the pipe was leaking potable water, the discharge was not illegal. The City

[23] *See id.*
[24] *See* Tentative Order R9-2012-0011 § II.E.2.a.(4)(c) at 57.

failed to identify whether it was possible to fix the leak, instead it took the easy route and relied on an exemption in the current Stormwater permit.

This flies in the face of the Clean Water Act, which requires that all non-storm water discharges be effectively prohibited.[25] The Regional Board should include language to compel Copermittees to reduce or eliminate ***all*** non-stormwater discharges, where possible. There is no acceptable reason that easily preventable non-storm water discharges should be allowed to go unattended.

H. The Permit Should Require Copermittees to Maintain a Hotline and Online Pollution Reporting System as Part of Their Illicit Discharge Detection and Elimination Programs.

The Administrative Draft Permit recognizes that public hotline reports can provide valuable information to help Copermittees identify and eliminate illicit discharges.[26] However, the Administrative Draft Permit fails to require Copermittees to maintain telephone and online reporting hotlines. By not explicitly requiring methods for the public to formally contact the Copermittees to report illicit discharges and pollution problems, the Administrative Draft Permit invites Copermittees to eliminate this portion of their jurisdictional program.

Instead, the Permit should require that each Copermittee must maintain a telephone hotline to accept stormwater complaints from the public. The Permit should also require Copermittees to maintain an email address (not just an online form) to allow e-mail reporting of stormwater complaints. As part of these requirements, Copermittees should be required to make this information available prominently on the Copermittee's webpage, and all the contacts should be listed on one page of the regional clearinghouse.

1. <u>The Permit should require Copermittees to provide follow up information to those who request it.</u>

Further, the Permit should require Copermittees to respond with follow-up or complaint resolution information to any person using the telephone or e-mail complaint reporting system. San Diego Coastkeeper often passes on to local jurisdictions pollution reports that the organization receives from individuals wishing to remain anonymous. San Diego Coastkeeper always asks for follow-up after the complaint has been investigated, and while some jurisdictions are good about providing the information, others are inconsistent or resistant. Providing the public and interested environmental groups with information about the resolution of pollution complaints, when requested, is important to foster public buy-in to the stormwater program and to encourage citizens to report pollution problems when they see them.

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[25] *See* 33 U.S.C. § 1342.
[26] *See* Tentative Order R9-2012-0011 at § II.E.2.d.(2)(a) at 60.

2. The Permit should require the Copermittees to make their hotline response databases publicly available.

The Permit should require that the Copermittees make their hotline response databases publicly available on the Regional Clearinghouse. This will increase transparency regarding Copermittee response to hotline complaints. It will also help environmental groups and stakeholders to work with Copermittees to educate the public so that hotline calls and reports become more effective.

IV. THE ADMINISTRATIVE DRAFT PERMIT FAILS TO PROPERLY INCORPORATE ADOPTED TOTAL MAXIMUM DAILY LOADS.

A. The Permit Must Include Mass Limits In Order to Comply with the Total Maximum Daily Loads That Include Mass Limits.

The Total Maximum Daily Loads for Indicator Bacteria, Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay (adopted June 11, 2008) and the Total Maximum Daily Loads for Indicator Bacteria, Project I—Twenty Beaches and Creeks in the San Diego Region (adopted February 10, 2010) include both effluent limitations and wasteload allocations. However, the Administrative Draft Permit excludes the wasteload allocations. Not only are wasteload allocations a requirement of a valid Total Maximum Daily Load (TMDL),[27] but a large amount of time and effort went into developing the wasteload allocations to limit the total amount of bacteria loading into local waters. Weight-based wasteload allocations included in the TMDLs must be included in the Permit.

B. The Administrative Draft Permit Properly Prohibits Exceedances for Diazinon in Chollas Creek and Dissolved Copper in the Shelter Island Yacht Basin.

The Administrative Draft Permit properly removed allowable exceedances from the Diazinon TMDL in Chollas Creek and the Dissolved Copper TMDL in the Shelter Island Yacht Basin.[28] It is proper for the Regional Board to prohibit exceedances for Diazinon in Chollas Creek and Dissolved Copper in Shelter Island Yacht Basin because this will result in better water quality for Chollas Creek and San Diego Bay.

C. The Administrative Draft Permit Should Reflect the Correct Limit for Total Nitrogen in Rainbow Creek.

The TMDL for Total Nitrogen and Total Phosphorus in Rainbow Creek Watershed states that as of 2009, Total Nitrogen load allocation for Commercial Nurseries is 390 kg/yr. However, the Administrative Draft Permit states the total Nitrogen load allocation for Commercial Nurseries is 399 kg/yr.[29] The Permit must reflect the 390 kg/yr value in the Rainbow Creek Watershed Nitrogen and Phosphorus TMDL.

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[27] *See* 40 C.F.R. 130.2(i).
[28] *See* Tentative Order R9-2012-0011 Attachment E at E-2 and E-4.
[29] *See* Tentative Order R9-2012-0011 Attachment E, Table 3.4 at E-8.

D. The Administrative Draft Permit Improperly Calculates the Limit for Total Coliform at Baby Beach in Dana Point Harbor.

The dry weather interim effluent limitation for Total Coliform is incorrect.[30] According to the TMDL for Indicator Bacteria, Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay, the City of Dana Point and the County of Orange must achieve a 50% reduction of indicator bacteria at Baby Beach by the 3rd year after approval, which is 2012. The dry weather municipal MS4 existing wasteload for Total Coliform at the time the TMDL was completed was 9.0 billion MPN/day. The wasteload allocation outlined by the TMDL is 0.86 billion MPN/day. Therefore, a 50% reduction means the City of Dana Point and the County of Orange must meet an interim allocation by 2012 of 4.93 billion MPN/day. However, the Administrative Draft Permit lists this interim limitation as 5.32 billion MPN/day. To comply with the TMDL, the Permit must reflect the TMDL's requirement, which is 4.93 billion MPN/day by 2012.[31]

E. The Permit Should List Previous Wet Weather Interim Effluent Limits to Maintain Compliance.

The Administrative Draft Permit does not list numeric values for wet weather interim effluent limitations to be reached by 2012 for any TMDL that includes them. Even if the Copermittees have already complied with the interim limits, the Permit should include these values to maintain compliance with the loading limits.

V. WATER QUALITY IMPROVEMENT PLANS HAVE THE POTENTIAL TO ENCOURAGE COPERMITTEES WITHIN A WATERSHED TO WORK TOGETHER TO IMPROVE WATER QUALITY.

The Water Quality Improvement Plans are the focal point of the Administrative Draft Permit. Their goal, to "guide Copermittees' jurisdictional runoff management program implementation efforts towards achieving the outcome of improved water quality in MS4 discharges and receiving waters," is proper. This approach recognizes that watersheds span multiple jurisdictions and that water quality will not improve unless all jurisdictions in a watershed work together. However, the Water Quality Improvement Plan process has room for improvement.

A. The Water Quality Improvement Plans Should Best Protect, Preserve, Enhance, and Restore Waters of the State.

The Administrative Draft Permit states that the goal of the Water Quality Improvement Plans is "to attain ***reasonable*** protection, preservation, enhancement, and restoration of water quality and

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[30] *See* Tentative Order No. R9-2012-0011 at Attachment E, Table 5.4 at E-14.

[31] Calculation:
9.0 billion MPD/day – 0.86 billion MPD/day = 8.14 (Total to be reduced)
8.14 billion MPD/day / 2 = 4.07 billion MPD/day (50% of reduction)
9.0 billion MPD/day – 4.07 billion MPD/day = 4.93 billion MPD/day (2012 Interim Target)

designated beneficial uses of waters of the state."[32] "Reasonable" protection, preservation, and restoration of our waters is not enough. The State Water Board's mission is to "preserve, enhance, and restore the quality of California's water resources."[33] The Regional Board's mission is to "develop and enforce water quality objectives and implementations plans that will ***best protect*** the state's waters…."[34]

To properly reflect the goals of the Water Quality Improvement Plans and to bring them in line with the State Water Board's and the Regional Board's mission, the goal of the Water Quality Improvement Plans should be "to ***best*** protect, preserve, enhance, and restore water quality and designated beneficial uses of waters of the state."[35]

B. The Public Should Be Included in Developing Water Quality Improvement Plans.

The Administrative Draft Permit relegates public participation in Water Quality Improvement Plans to a lone 30 day public review and comment period after the Copermittees have spent an entire year developing Water Quality Improvement Plans.[36] Not only is there only one 30-day public review period, but it is likely that each of the nine Water Quality Improvement Plans will be subject to concurrent public review periods. For organizations like San Diego Coastkeeper and Orange County Coastkeeper that would review Water Quality Improvement Plans for multiple watersheds, concurrent 30-day review periods for all 9 plans will preclude meaningful participation or comments.

1. <u>The Permit should encourage Copermittees to involve stakeholders throughout the Water Quality Improvement Plan development process.</u>

Too often Copermittees and environmental groups view each other as adversaries instead of potential partners and resources. But environmental groups and other stakeholders have key information, data, knowledge, and resources that can assist Copermittees in developing a robust Water Quality Improvement Plan. The Permit should encourage Copermittees to identify key stakeholders in each watershed and involve those stakeholders either formally or informally throughout the Water Quality Improvement Plan development process. Involving key stakeholders early and often as Water Quality Improvement Plans are developed will ensure that Copermittees hear and address stakeholder concerns and suggestions early in the process and avoid a situation where completed plans would need to be completely revised in response to comments received after Water Quality Improvement Plans are completed.

2. <u>The Permit should include more public review and comment points and stagger the review periods.</u>

To ensure meaningful public participation in the Water Quality Improvement Plan development

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[32] Tentative Order No. R9-2012-0011§ II.B. at 13 (emphasis added).
[33] State Water Board Website http://www.waterboards.ca.gov/about_us/water_boards_structure/mission.shtml
34State Water Board Website (emphasis added)
http://www.waterboards.ca.gov/about_us/water_boards_structure/mission.shtml.
35 Tentative Order No. R9-2012-0011 § II.B. at 13 (emphasis added).
36 *See* Tentative Order No. R9-2012-0011 § II.F.1 at 91.

process, the Permit should include additional public review periods and stagger the final review of Water Quality Improvement Plans so not all 9 plans are reviewable concurrently. Formal public review and comment periods should be incorporated at each major decision step in the Water Quality Improvement Plan process. To allow the watershed groups maximum flexibility, the Permit could require watershed groups to submit a public involvement plan setting a schedule for public review of each main component of the plan as it is developed. This approach could also facilitate a staggering of Water Quality Improvement Plan review periods.

3. The Permit should include language explicitly involving the public in setting water quality priorities.

Water quality priorities are the foundation of Water Quality Improvement Plans. Because the entire Water Quality Improvement Plan will be based on the watershed's water quality priorities, the public must be actively involved in identifying priority pollutants or receiving water conditions within each watershed.

To facilitate public participation in identifying a watershed's priority pollutants, the Permit should:

- Specify that "all available physical, chemical, and biological receiving water monitoring data" includes data collected by third parties.

- Mandate that watershed groups make a "call for data" and allow interested third parties 30 days to submit data to the watershed groups for consideration.

- Require watershed groups to submit a preliminary priority pollutant list for Regional Board and public review and comment, along with a case for support identifying data and information relied on to select the priority pollutants or receiving water conditions. This review and comment period should be held prior to identifying pollutant sources, developing numeric targets and schedules, or selecting water quality improvement strategies.

4. The Permit should involve the public in identifying pollutant sources and stressors.

Environmental Groups and other key stakeholders often have specific information regarding pollutant sources within a watershed. Groups like San Diego Coastkeeper and Orange County Coastkeeper frequently receive calls from concerned citizens about facilities, neighborhoods, or activities that may be generating pollutants. These groups and others also have the capacity to reach out to their members and volunteers to specifically solicit information about potential pollutant sources.

To facilitate public participation in identifying pollutant sources, the Draft Permit should:

- Specify that "review of available data" includes complaints received through stormwater hotlines or reported by citizens or environmental groups.

- Mandate that watershed groups make a "call for data" and allow interested third parties 90 days to submit pollutant source data to the watershed groups for consideration.

- Emphasize that pollutant source identification is an ongoing process and does not only occur during the development of the Water Quality Improvement Plan.

- Specifically allow that Copermittees or stakeholder groups may perform special studies to further refine pollutant source identification, and that such information will be considered during the adaptive management process.

- Require watershed groups to submit a preliminary pollutant source list for Regional Board and public review and comment, along with a case for support identifying data and information relied on to select the priority pollutants or receiving water conditions. This review and comment period should be held prior to developing numeric targets and schedules, or selecting water quality improvement strategies.

5. <u>The Permit must require hearings for proposed Water Quality Improvement Plans.</u>

California law requires the Regional Board hold a public hearing before adopting any water quality control plan.[37] Water Quality Improvement Plans qualify as "water quality control plans" and therefore are subject to public hearing requirements.[38] The criteria to be considered a "water quality control plan" subject to a public hearing are that the plan: *(1)* is created for a specific area or region; *(2)* protects the beneficial uses of waters; *(3)* sets limits to protect beneficial uses; *(4)* includes an implementation program designed to meet water quality objectives.[39] The Water Quality Improvement Plans meet all the criteria of a water quality control plan.[40] Therefore, the permit must require, not merely allow, public hearings for Water Quality Improvement Plans.[41]

C. The Permit Should Specify the Regional Board Staff's Role in Developing Water Quality Improvement Plans.

Just as involving key stakeholders early and often as Water Quality Improvement Plans are developed will avoid the potential for having to start from scratch on the plans, Regional Board staff participation throughout the Water Quality Improvement Plan process is imperative. The Draft Permit should reflect when and how the Regional Board staff intends to be involved in Water Quality Improvement Plan development. At a minimum, the Regional Board should receive monthly updates from watershed groups and should provide formal review of water quality priorities, pollutant sources identified, numeric targets and schedules, strategies and schedules, and monitoring and assessment plans as they are developed.

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[37] *See* Cal. Water Code § 13244.
[38] *See* Cal. Water Code § 13050(j).
[39] *See id.*
[40] *See* Tentative Order No. R9-2012-0011 §§ II. B.1., B.2(a) & (d), B.3 at 13-18.
[41] *See* Tentative Order No. R9-2012-0011 § II. F.1.

D. Copermittees Should Implement Water Quality Improvement Plans as Soon as the Plans are Approved.

The Administrative Draft Permit contains inconsistent deadline requirements for Water Quality Improvement Plans. Administrative Draft Permit requires Copermittees "to implement" all the requirements in Provision B, related to the Water Quality Improvement Plans, within one year of the permit's adoption.[42] But the Administrative Draft Permit also allows Copermittees 180 days after submission "to commence with implementation of the Water Quality Improvement Plan."[43] Copermittees should begin implementing Water Quality Improvement Plans as soon as they are approved.

E. The Permit Should Require Interim and Final Numeric Targets and Schedules Based on Applicable Water Quality Standards.

The Administrative Draft Permit states that Copermittees must develop and incorporate interim and final numeric targets into their Water Quality Improvement Plans.[44] The permit should direct Copermittees that final targets must be compliance with applicable water quality standards. Interim targets should reflect incremental, yet demonstrable, progress towards improving water quality. Interim targets will allow the Copermittees, the Regional Board, and the public to fully assess Copermittees' progress towards compliance with final targets.

F. Each Copermittee Should Be Held Accountable For Achieving Watershed Numeric Targets.

During the focused meeting process, some Copermittees indicated that they intended to focus jurisdictional program efforts on one watershed and effectively ignore water quality priorities in other watersheds that are also within its jurisdiction. While this approach may be consistent with jurisdictions focusing resources where they can have the most impact, it also presents the potential that watershed priorities will be "orphaned" or that one jurisdiction will carry the primary or sole burden of implementing water quality improvement strategies within the watershed.

In order to help identify this problem, the Water Quality Improvement Plan schedules for implementing water quality improvement strategies must indicate which jurisdiction(s) is responsible for each strategy and cross-reference the section and page in the jurisdictional plan where each Copermittee commits to implementing the strategy.[45]

To avoid this potential problem and ensure that each jurisdiction remains actively involved in ensuring that each watershed within its jurisdiction achieves its interim and numeric targets, the Permit should reflect that each jurisdiction will be held accountable for achieving the watershed numeric targets.[46] Further, the Permit should specify that the Regional Board will reject any Water

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[42] *See* Tentative Order No. R9-2012-0011 § II.B. at 13.
[43] Tentative Order No. R9-2012-0011 § II.B.6 at 21 and § F.1 at 91.
[44] *See* Tentative Order No. R9-2012-0011 § II.B.2.d at 17.
[45] *See* Tentative Order No. R9-2012-0011 § II.B.3.b(1) at 19.
[46] *See* Tentative Order No. R9-2012-0011 § II.B.2.d at 18.

Quality Improvement Plan including orphaned priorities.[47]

These proposed changes are consistent with the Administrative Draft Permit's special study requirements. The Administrative Draft Permit requires Copermittees to implement at least three special studies within each Watershed Management Area, and the special studies require some form of participation by all Copermittees within the Watershed Management Area.[48] This requirement demonstrates the Regional Board's commitment to avoiding "orphaned" water quality priorities or having the primary responsibility for watershed strategy implementation fall to only Copermittee.

G. The Adaptive Management Process Should Include a Formal Public Participation Process.

The Administrative Draft Permit recognizes that public participation is an important element in the adaptive management process.[49] However, the Administrative Draft Permit fails to detail how and when the Copermittees are to solicit recommendations for modifications to the Water Quality Improvement Plans or Jurisdictional Runoff Management Plans as part of a public participation process.

For Water Quality Improvement Plans, the permit should include a process during which the Copermittees in each Watershed Management Area prepare a progress report, akin to a Report of Waste Discharge, that details the water quality improvement strategies completed or in progress, along with water quality data (from the Copermittees and third parties) and an assessment of progress towards interim and final numeric targets. Before revising the Water Quality Improvement Plan, the Copermittees must solicit comments from the Regional Board and public. The revised Water Quality Improvement Plan should be subject to public comment and a public hearing.

The Administrative Draft requires Copermittees to create a means "for public participation…in updating, developing, and implementing [their] jurisdictional runoff management program."[50] Part of the adaptive management process for Jurisdictional Runoff Management Programs requires Copermittees to take into account recommendations they receive.[51] To involve the public in the adaptive management process for jurisdictional runoff management programs, the Permit should require each Copermittee to solicit public comment on its initial findings and proposed changes before changes to the jurisdictional runoff management program is finalized.

H. The Adaptive Management Process for Water Quality Improvement Plans Should Occur More Frequently Than Every Three Years.

The Administrative Draft Permit currently requires Copermittees to implement the iterative process at least once every three years.[52] The Copermittees should be required to implement the iterative

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[47] *See* Tentative Order No. R9-2012-0011 § II.F.1 at 91.
[48] *See* Tentative Order No. R9-2012-0011 § II.D.2.e. at 46.
[49] *See* Tentative Order No. R9-2012-0011 § II.B.5.a.(h) at 20.
[50] *See* Tentative Order No. R9-2012-0011 § II.E.7(b) at 90.
[51] *See* Tentative Order No. R9-2012-0011 § II.B.5(b)(1)(e) at 21.
[52] *See* Tentative Order No. R9-2012-0011 § II.B.5.a.(1) at 20.

process at least every two years. More frequent adaptive management encourages the Copermittees to modify programs to address new information as it becomes available. It also compels the Copermittees to develop an adaptive management process that is nimble and can quickly incorporate change as needed.

Further, the proposed three year requirement will effectively cause the Copermittees to engage in one long and one short adaptive management process within a permit cycle instead of two equally spaced processes.

The sample calendar below illustrates the challenge with the current schedule:

Activity	**Frequency/Timing**	**Hypothetical Date**
Permit issued		January 1, 2013
Water Quality Improvement Plan Submitted	Within 12 months of permit issuance *§ B*	December 31, 2013
Public process	30 days after submittal *§F.1.*	January 2-31, 2014
Water Quality Improvement Plan Implemented	Within 180 days after submittal *§B.6.*	May 30, 2014
Adaptive Management	At least once every three years *§B.5.a.*	May 30, 2017
Report of Waste Discharge including proposed changes to Water Quality Improvement Plans	180 days before permit expires *§F.5.b.*	May 30, 2018
Permit Expires	5 years from issuance	December 31, 2018

I. Interim Numeric Targets Should Align With the Adaptive Management Process Schedule.

The Administrative Draft Permit requires watershed groups to set final and interim numeric targets and schedules.[53] While the Administrative Draft Permit provides some guidance that "interim numeric targets must be based on measurable criteria or indicators that can demonstrate incremental progress toward achieving the final numeric targets," there is no guidance regarding the scheduling of the interim numeric targets. The Permit should specify that the interim numeric targets should be set on the same schedule as the adaptive management process. This will provide the Copermittees with concrete goals to evaluate during the adaptive management process and require the Copermittees to collect sufficient data to evaluate progress to those goals by the time the adaptive management process occurs.

[53] *See* Tentative Order No. R9-2012-0011 § II.B.2.d. at 17-18.

VI. ACTION LEVELS ARE ONLY SUFFICIENT IF THE REGIONAL BOARD DETERMINES NUMERIC EFFLUENT LIMITS ARE INFEASIBLE.

A. The Clean Water Act Requires the Regional Board to Assess Whether Numeric Effluent Limits are Feasible.

The Clean Water Act, its regulations, and case law all require that NPDES permits contain numeric effluent limitations when feasible. The Regional Board has failed to assess whether any numeric effluent limitations are feasible for this permit. Numeric effluent limitations are not *de facto* infeasible in stormwater permits, nor are they limited to end-of-pipe limits.

Numeric effluent limitations can be expressed as: *(1)* pollutant reduction levels for parameters that are applied system-wide rather than to individual discharge locations; *(2)* requirements to meet performance standards for specific pollutant parameters or *(3)* in-stream targets for specific pollutant parameters.[54]

The Regional Board must make a good faith effort to assess the feasibility of including numeric effluent limits within this permit in order to comply with the Clean Water Act's technology-forcing provisions.

B. Non-Storm Water Numeric Action Levels Should Be Numeric Effluent Limits.

The Clean Water Act requires that all municipal stormwater permits "effectively prohibit" non-stormwater discharges.[55] Yet the Administrative Draft Permit includes detailed "Non-Storm Water Action Levels" to set water-quality based goals for non-stormwater discharges.[56] Because Copermittees are responsible for "effectively prohibiting" non-stormwater discharges within their jurisdictions, mere "action levels" for non-stormwater discharges are inappropriate. These levels should be included as enforceable numeric effluent limits. By allowing non-stormwater discharges that fall within the numeric effluent limits and do not cause or contribute to a violation of water quality standards, the permit would provide an effective mechanism to determine whether or not Copermittees are effectively prohibiting non-stormwater discharges within their jurisdiction. Further, these numeric effluent limits are feasible because the Clean Water Act recognizes that non-stormwater discharges should be eliminated.

VII. MONITORING AND ASSESSMENT REQUIREMENTS MUST ENSURE THAT COPERMITTEES IDENTIFY PROGRESS TOWARDS WATERSHED GOALS AND TRACK THE HEALTH OF THE WATERSHEDS.

The Administrative Draft Permit sets out a comprehensive system of monitoring and assessment procedures that will ensure Copermittees are able to detect and eliminate illicit discharges and connections. The Regional Board must recognize the importance of extensive monitoring in

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[54] *See* Environmental Protection Agency, *Establishing Total Maximum Daily Load Wasteload Allocations for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs*, November 22, 2002.
[55] *See* 33 U.S.C. § 1342; Clean Water Act § 402(p)(3)(B)(ii).
[56] *See* Tentative Order No. R9-2012-0011 § II.C.1. at 22-24.

making continued progress towards clean waters in the San Diego Region. If the Permit does not include enough monitoring, the watersheds in Region 9 will be in danger of increased pollutant discharges that Copermittees will not be able to detect.

A. The Permit Must Include Sufficient General Monitoring Requirements to Detect Changing Conditions Within Watersheds.

During the focused meeting process, some Copermittees proposed drastically reducing the amount of monitoring required in the Administrative Draft Permit. One Copermittee representative even likened routine watershed monitoring to a colonoscopy.

The permit must continue to require the Copermittees to not just monitor areas with known pollution problems, but also to track areas currently meeting water quality standards to ensure that they do not become impaired or impacted. Environmental Groups seek to avoid a monitoring program that fails to provide relevant information to the public and regulators as to actual water quality impairments.

Copermittees should be encouraged to partner with local environmental groups to assist in monitoring areas to track general trends of watershed health. Many local groups already sample water quality and would be interested in partnering with Copermittees and watershed groups to ensure that baseline water quality data for the whole watershed is collected. For example, San Diego Coastkeeper has a state-certified water quality laboratory and has been using volunteers to collect water quality data and assess the health of our watersheds for years.

B. The Permit Should Allow Visual Observations to Be Included within Copermittees' Inspection Programs.

The Administrative Draft Permit does not explicitly allow Copermittees to create an inspection program that relies on visual observations. While visual observations alone should not comprise the Copermittees' entire inspection program, the Permit should allow Copermittees to include visual inspections as a key component of inspection programs.

Further, to assist Copermittees in completing visual inspections, particularly in residential areas or shopping centers, the Permit should explicitly allow Copermittees to use information gathered from volunteer monitoring or patrol programs. Such programs could be operated by the Copermittees or environmental groups and would be subject to a training program to ensure volunteers are able to spot potential violations and avoid trespassing or confronting property owners.

C. The Permit Should Specify that Copermittees Must Accept Quality-Controlled Data Received from Third Parties.

The Administrative Draft Permit and the Regional Board staff have indicated that Copermittees should use third party water quality monitoring data to assist in assessing our watersheds and the

Copermittees' progress towards achieving water quality standards.[57] However, some Copermittees are reluctant to use data collected by third parties. One Copermittee articulated its distaste for third party-collected data by saying that third party data is not as rigorous as data collected by the Copermittees and therefore trying to compare third party data to Copermittee data is "like comparing apples and oranges."

The Permit should specify that Copermittees must use third party data that meets particular criteria. These criteria should require third parties to maintain and make available for review the following information: *(1)* a quality assurance project plan; *(2)* a list of methods used; and *(3)* standard operating procedures.

Additionally, the Administrative Draft Permit's "Assessment Requirements" should specify that Copermittees must evaluate not just "the data collected pursuant to Provisions D.1, D.2, and D.3" to identify causes of exceedances, but must also solicit and evaluate third party data that meets that permit criteria to identify causes of water quality problems.

D. If the Permit Allows Copermittees to Use Modeling to Determine Water Quality Conditions, the Permit Must Include Safeguards to Ensure Reliable Modeling Results.

The Administrative Draft Permit does not contemplate Copermittees using modeling as a tool to monitor and assess water quality. During the focused meeting process, the Copermittees have asked to use modeling to assess water quality, and the Regional Board staff appeared receptive to the idea.

Modeling can be an important predictive tool, or it can be meaningless garbage. The quality of the modeling hinges on the quality and quantity of the data on which the model is based, along with the skill of the modeler. To ensure that any water quality modeling completed in conjunction with the permit produces robust results, the permit must include stringent safeguards. These safeguards must include: *(1)* requiring the input data to include recent (no older than five years) water quality information from within the watershed, *(2)* requiring Copermittees to use an experienced and qualified water quality modeling professional to complete the model, *(3)* requiring Regional Board oversight to assess whether the monitoring results are in line with common-sense predictions of water quality, and (4) quality control hindcasting in certain segments to validate the model for use in subsequent years.

E. The Monitoring and Assessment Requirements Should Begin Immediately Upon Enrollment Under the Order.

The Administrative Draft Permit 's monitoring and assessment requirements appear to go into effect immediately upon adoption, but it does not say so explicitly. This could create confusion amongst Copermittees because other provisions of the Administrative Draft Permit state specific time frames for implementation.[58] The Regional Board should explicitly say in the Permit that Provision D's requirements go into effect immediately upon enrollment to avoid ambiguity.

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[57] *See* Tentative Order No. R9-2012-0011 § II.B.2 at 15.
[58] *See* Tentative Order R9-2012-0011 at §§ II.B, B.5, B.6, C, E, F.1, and F.3.

F. The Permit Should Not Allow Historical Data to Excuse Copermittees from Analyzing Non-Stormwater Discharges.

The Clean Water Act requires that Copermittees effectively prohibit non-stormwater discharges. Therefore, it is inappropriate for the permit to allow Copermittees to skip analyzing non-stormwater discharges that it fails to eliminate.[59] The Copermittees must analyze all non-stormwater discharges and demonstrate that those discharges comply with the non-stormwater numeric effluent limits.

If the Permit allows Copermittees to avoid analyzing constituents if historical data indicates analysis is not needed, the Permit should limit "historical data" to that collected within the past ten years. Technology has increased by leaps and bounds in recent years (i.e. minimum detection limits,) and more accurately detects pollutants.

G. The Permit Must Clarify the Dry Weather Watershed Monitoring Frequency Requirements.

Several sections of the Dry Weather Watershed Monitoring section have seemingly contradictory timing requirements. The Administrative Draft Permit states:

> Dry weather watershed monitoring is required at least every two years for each monitoring station. At least two dry weather watershed monitoring events must be scheduled for each watershed monitoring station per monitoring year. One monitoring event is required during the dry season (May-September) and one monitoring event is required on a dry weather day during the wet season (October-April), after the first storm event. *See* Tentative Order No. R9-2012-0011 at D.2(b)(3).

This language is unclear and implies that monitoring must occur at least once every two years but also twice per year. Similar language can be found in sections D.2(b)(4), and (5), as well as parts (1) and (4) from section D.2.c. The Permit must resolve these seemingly contradictory statements to ensure the Copermittees are able to fully understand and meet their requirements.

H. To Detect Illicit Flows, the Permit Should Require Copermittees to Install a Network of Flow Meters.

Many Copermittees have taken issue with the Administrative Draft Permit's dry weather monitoring requirements. The Copermittees argue that the proposed program is cumbersome, costly, and would not result in identifying illicit flows.

To replace the dry weather monitoring scheme in the Administrative Draft Permit with an approach that will identify illicit flows, the Permit should require Copermittees to install a network of flow meters. The flow meters could constantly monitor flows and alert Copermittees when flow peaks.

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[59] *See* Tentative Order R9-2012-0011 § II.D.1.a(1)(c)(iii) at 30.

This will more accurately allow Copermittees to identify illicit dry weather flows than the dry weather monitoring program as currently proposed.

I. The Permit Should Require Additional Information for Claims that Non-Stormwater Discharges Originate Outside a Copermittee's Jurisdiction.

The Administrative Draft Permit currently requires Copermittees to screen discharges entering their systems and to identify those discharges from sources outside the control of the Copermittee.[60] The Permit should require Copermittees to explain from what jurisdiction the discharge is entering their system and the evidence supporting that conclusion. This will increase accountability and transparency in the Permit by making sure those responsible for violations are easily identified.

J. The Permit Should Allow Third Party Participations in Special Studies.

The Administrative Draft Permit requires Copermittees to implement at least three special studies within each Watershed Management Area and at least two regional special studies for the San Diego Region.[61] These studies are important to ensure that the Copermittees work together to identify sources of high priority pollutants and assess the efficiency of various best management practices within a watershed to achieve watershed goals. The Administrative Draft Permit's approach properly requires each Copermittee within a watershed to participate in each of the watershed's special studies. However, the Permit should also specifically allow Copermittees to partner with environmental groups or other third parties to complete regional special studies.

For example, Copermittees within the Peñasquitos watershed group might partner with San Diego Coastkeeper to complete a pilot project combining GPS-based water quality data and volunteer patrols to track pollution up a watershed to identify a pollution problem's source. Or perhaps Copermittees within the Carlsbad watershed might work with the Building Industry Alliance and the Escondido Creek Watershed Conservancy to create a pilot Escondido Creek restoration project and assess the feasibility of using such restoration as a regional mitigation project for development within the Carlsbad watershed.

By encouraging the Copermittees to partner with third parties to complete special studies, the Permit could foster watershed-based collaboration and leverage efficiencies and additional resources that third parties bring to the table.

K. The Permit Should Designate County of San Diego as the Lead Copermittee for San Diego County.

The current San Diego Regional MS4 permit designates the County of San Diego as the lead copermittee. This process has ensured that the Copermittees coordinate their reporting, monitoring, assessment, and programs. It has also led to regular public meetings where the San Diego Copermittees meet and discuss the permit, compliance and reporting. These meetings provided Regional Board staff, environmental groups, consultants, and other interested parties and

[60] *See* Tentative Order R9-2012-0011 § II.D.4.a(1)(a)(iii) at 46.
[61] *See* Tentative Order R9-2012-0011 §§ II.D.2.e, D.3 at 46.

opportunity and venue to connect with all the San Diego Copermittees at the same time. This regional coordination was also a great asset to the focused meeting process, with the San Diego Copermittees bringing organized and coordinated suggestions for improving the permit.

As the region moves forward with a new permit, the Copermittees, Regional Board staff, and interested parties could greatly benefit from continued coordination and regular public meetings among the Copermittees. Further, the Administrative Draft Permit requires Copermittees to develop two special studies for the entire San Diego Region "related to a water quality priority issue or potential water quality concern identified by the Copermittees for the entire San Diego Region."[62] It will be difficult, if not impossible, for the San Diego Copermittees to identify water quality priority issues for the entire region without collaboration. That collaboration should involve the public, particularly when identifying water quality priority issues for the entire region. Therefore, the permit should require continued Copermittee collaboration for the San Diego Copermittees that includes meetings open to the public.

VIII. THE PERMIT'S DEVELOPMENT PLANNING PROVISIONS MUST AGGRESSIVELY PROMOTE PRACTICES TO ELIMINATE DEVELOPMENT AS A POLLUTANT SOURCE CAUSING OR CONTRIBUTING TO WATER QUALITY PROBLEMS.

Low Impact Development ("LID") is an acknowledged and proven Best Management Practice ("BMP") for effective storm water management for new and significant redevelopment projects. LID BMPs are often less expensive to install, require less maintenance and provide ecosystem benefits that conventional stormwater controls cannot offer. For example, a recent analysis of the economics of LID found the benefits to include reduced flooding, improved water quality, increased ground water recharge, reduced public expenditures on stormwater infrastructure, reduced energy use, improved air quality, and enhanced aesthetics and property value.[63]

The report goes on to describe American Forests' CITYgreen model as it applies to San Diego. The model calculates the volume of stormwater absorbed by San Diego's existing tree canopy and estimates the amount of cost-avoided in stormwater management this canopy allows. The study concludes that San Diego would have to expend $0.16 billion to expand their existing stormwater infrastructure to treat the amount the cities trees already manage. Studies and analyzes like these help explain the myriad benefits of LID as a system the Copermittees can use to effectively manage stormwater while also ensuring the wise expenditure of funds.

The Administrative Draft Permit fails to underscore the key role LID plays in achieving the region's water quality goals. Other nearby MS4 permits contain language reflecting that recent studies have found LID best management practices to be effective storm water management tools that minimize adverse impacts on storm water runoff quality and quantity resulting from urban developments.[64] The Permit should include this language in order to clarify and reinforce that LID BMPs are

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[62] *See* Tentative Order R9-2012-0011 at § II.D.3 at 46.
[63] MacMullen, Ed, The Economics of Low-Impact Development: A Literature Review, ECONorthwest 19 (November 2007).
[64] *See* Orange County Permit, Order No. R8-2009-0033 at L.61.

preferred over any other non-LID method.

A. The Permit Should Stress Low-Impact Development Best Management Practices as the Preferred Best Management Practices for Use in Water Quality Improvement Strategies.

The Administrative Draft Permit requires Copermittees to develop water quality improvement strategies that prioritize measures that can be taken to reduce pollutants.[65] Rather than giving Copermittees the ability to equally prioritize structural and non-structural Best Management Practices, the Permit should clearly state that LID BMPs are the preferred method and should receive the highest priority. The Administrative Draft Permit fails to mention of LID in the Water Quality Improvement Strategies section. At the very least, the Water Quality Improvement Strategies section should reference section II.E.3(a)(3) where LID definitions and examples are given. The Permit should include a chart which prioritizes LID, similar to the structure of the North Orange County permit.

B. The Permit Should Prioritize Various Low-Impact Development Best Management Practices and Include Examples of these Best Management Practices.

The Administrative Draft Permit fails to incorporate an LID BMP prioritization regime similar to existing MS4 permits in Orange and Riverside counties.[66] Although the Administrative Draft Permit defines LID BMPs to include retention practices such as "infiltration, rainwater harvesting and reuse, evapotranspiration" and flow-through practices such as biofiltration. However, it leaves much of the judgment as to which LID BMPs would be utilized onsite to the proponent of the project.[67]

The Orange County MS4 permit adopted by the Santa Ana Regional Board prioritized LID principles by first instituting preventative measures (mostly non-structural measures, e.g., preservation of natural features to a level consistent with MEP; reducing impervious areas, etc.) and second, requiring mitigation. Mitigation is generally structural measures, such as infiltration, harvest and reuse, and biotreatment. However, even the LID BMPs required under the mitigation section were prioritized. If a party could not satisfy permit requirements to the MEP by utilizing preventative measures, then the party would be required to determine whether it was feasible to infiltrate, harvest and re-use and bio-filter/bio-retain, in that order. In so doing, the Regional Board provided guidance and certainty to those engaged in new or significant redevelopment rather than a mechanism that requires LID BMPs without stating a clear preference. As such, the Administrative Draft Permit should be modified to include a prioritization of LID BMPs.

C. The Permit Should De-Emphasize Biofiltration as a Low-Impact Development Best Management Practice.

The Administrative Draft Permit's definitions section lists biofiltration as a flow-through LID BMP

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[65] *See* Tentative Order No. R9-2012-0011 at § II.B.3. at18.
[66] *See* Orange County Permit, Order No. R8-2009-0033 at XII.C.4
[67] *See* Tentative Order R9-2012-0011 at Attachment C "Definitions."

that may have discharge storm water following pollutant reduction.[68] The Permit should de-emphasize biofiltration and other flow-through practices as LID BMPs because retention Best Management Practices are environmentally preferable due to their ability to prevent discharges. Including "biofiltration" in the definition of LID BMP, without including a LID BMP prioritization schedule, may create unnecessary reliance on "biofiltration" methods when other LID options would be preferable.

D. The Permit Should Require Biofiltration to Reach Equivalent Water Quality Standards as Other Best Management Practices.

The Administrative Draft Permit includes "biofiltration" as an available Low Impact Development Best Management Practice without requiring verifiable standards that effective biofiltration BMPs must satisfy. Without standards, developers are free to include biofiltration systems that do not guarantee onsite retention of pollutants. Additionally, the permit contains no oversight of any proposed biofiltration device to guarantee that it is properly sized and designed. While the Administrative Draft Permit requires that flow-through treatment control BMPs must "be ranked with high or medium pollutant removal efficiency for the project's most significant pollutants of concern," the Administrative Draft Permit fails to specify what those efficiency rates are or how they are to be calculated.[69]

Structural, proprietary, and/or engineered biofiltration devices should be permitted where appropriate. However, the Permit should hold those biofiltration devices to equivalent water quality standards and require proper monitoring to prove their initial and continued effectiveness as pollution control devices. For example, the Permit should require a four to five year post-construction monitoring regimen with at least annual reporting that includes data on wet and dry seasons to analyze biofiltration effectiveness for major developments.

E. The Permit Must Have More Stringent Post-Development Hydromodification Requirements for Flow Rates and Durations to be Consistent with the Riverside County Hydromodification Requirements, to Maintain Progress in Managing Development Storm Water Runoff, and to Comply with Anti-Backsliding Requirements.

The Administrative Draft Permit requires Copermittees to achieve post-development flow rates and durations that "do not exceed pre-development (naturally occurring) runoff flow rates and durations by more than 10 percent."[70]

However, Riverside County's MS4 permit does not allow 10% leeway for hydromodification post-development flow rates and durations. Instead, the Riverside County permit requires that "estimated post-project runoff discharge rates and durations must not exceed pre-development discharge rates and durations."[71] The Riverside County permit justified its hydromodification

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[68] *See* Tentative Order R9-2012-0011 at Attachment C "Definitions."
[69] *See* Tentative Order R9-2012-0011 § II.D.3.c.(2)(d)(iii) at 67.
[70] Tentative Order R9-2012-0011 § II.E.3(c)(3)(a).
[71] *See* Order R9-2010-0016 at F.1.h.

requirement, stating:

> The increased volume, velocity, frequency and discharge duration of storm water runoff from developed areas has the potential to greatly accelerate downstream erosion, impair stream habitat in natural drainages, and negatively impact beneficial uses.[72]

In light of this statement, and no such finding to the contrary in the Administrative Draft Permit , the Regional Board should not allow a 10% increase in flow rates or duration post-development.

The Permit cannot allow priority development projects to exceed naturally occurring runoff flow rates by 10 percent. The 10 percent exception would introduce inconsistent requirements within the Region and constitute illegal backsliding from Riverside County's MS4 permit. The Riverside County permit is currently the most recently enacted MS4 permit in Region 9 and represents the MEP standard that must be applied to the Permit.

More importantly, easing Riverside County's hydromodification requirements in favor of a 10 percent exception violates the Clean Water Act's anti-backsliding provisions. By allowing Riverside County to comply with a less stringent standard in a subsequent permit, the new Permit violates provisions enacted to ensure that permit standards continue to get increasingly more stringent instead of bowing to political pressure to ease standards.

F. The Permit Should Not Include Likelihood of Increased Erosion as a Criterion for Hydromodification Because Erosion is Not the Only Purpose of Hydromodification Requirements.

The Administrative Draft Permit currently allows Copermittees to achieve post-development flow rate and duration that is 10% above "the range of flows that result in increased potential for erosion or degraded channel conditions."[73] But erosion is not the only purpose of hydromodification requirements. As the Riverside County permit recognized, increased flow volume and duration can lead to erosion, as well as "impair stream habitat in natural drainages, and negatively impact beneficial uses."[74]

Developers should not be excused from complying with hydromodification requirements merely because the immediate channel into which a developments discharges would be entering are likely to erode. If the Permit provides an exception for developments that discharge into concrete channels or other channels not subject to erosion, the Regional Board will send the message that it has no interest in possibly reclaiming those creeks as natural drainages. Further, the exception fails to recognize that while the immediate receiving water may not be easily eroded, the discharges may impact downstream channels and habitat.

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[72] Order R9-2010-0016 at Findings D.2(g).
[73] *See* Tentative Order R9-2012-0011 § II.E.3(c)(3)(a).
[74] *See* Order R9-2010-0016 at Findings D.2(g).

G. The Permit Must Include Priority Development Requirements for Restaurants that are Less than 5000 Square Feet to be Consistent with Previous Permits.

The Riverside, Orange County and San Diego MS4 permits require restaurants where land development is less than 5,000 square feet to meet all SSMP requirements except for structural treatment BMP, numeric sizing criteria requirements and hydromodification requirement.[75] The Administrative Draft Permit fails to include this MEP provision. The Permit should include this language to be consistent with other MS4 permits and to make certain that all restaurant development projects are properly covered under the Permit.

H. The Permit Should Include a Water Quality Credit System.

The Administrative Draft Permit does not include any provisions or requirements for a water quality credit system. The only mention of a credit system is an example of a mitigation fund that Copermittees may implement as part of a mitigation plan under alternative compliance.[76] The Permit should include a requirement for water quality credits similar to what has been adopted in the Orange County permit: a "credit system clearly exhibits that it will not allow PDPs to result in a new impact from pollutant loadings over and above the impact cause by projects meeting LID requirements."[77] Including this language in the Permit will ensure water quality credits will be allocated to specific projects that actually offer a water quality benefit and will clarify the requirements of a water quality credit system.

I. The Permit Should Define "Infeasible" or Require Developers to Examine the Range of Feasible Projects and Select the Projects with the Greatest Water Quality Benefits.

The Administrative Draft Permit uses the term "feasible" and "infeasible" throughout the permit. For example, the Administrative Draft Permit requires LID BMPs to be implemented at all development projects where applicable and feasible.[78] The Administrative Draft Permit also allows Priority Development Projects to pursue "alternative compliance" with hydromodification requirements where fully implementation of hydromodification projects is "technically infeasible." The Administrative Draft Permit does not define "feasible" and specifically tasks Copermittees with defining "technical infeasibility."[79]

Allowing Copermittees to develop their own criteria as to what is "technically infeasible" runs the risk of Copermittees bowing to political pressure from building industry lobbyists and incorporating economic factors into the infeasibility standard. To ensure a robust and consistent standard of "technical infeasibility," the Regional Board should define a standard and explicitly direct that "technical infeasibility" cannot consider financial or economic factors.

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[75] *See, e.g.*, Riverside Permit, F.1(d)(2)(c); Orange County Permit, F.1(d)(2)(c); San Diego Permit, D.1(d)(2)(e).
[76] *See* Tentative Order R9-2012-0011 § II.E.3(c)(4)(c)(iv).
[77] *See* Order No. R9-2009-0002 at F.1(d)(7)(g).
[78] *See* Tentative Order R9-2012-0011 § II.E.3(a)(3).
[79] *See* Tentative Order R9-2012-0011 § II.E.3(c)(4)(b).

Further, the development community has consistently articulated engineers' and geotechnical experts' concerns that forcing infiltration could compromise the structural integrity of development projects and expose developers to liability. While the Environmental Groups recognize the development community's concerns, the answer is not to eliminate hydromodification requirements in San Diego County. Instead, the answer is for the Regional Board to articulate, in conjunction with Copermittees, Environmental Groups, the development community, and the green building community, a fair definition of technical infeasibility that maximizes environmental protection and public safety.

J. The Permit Could Incorporate Hydromodification Requirements to Prioritize On-site Measures while Recognizing Hydromodification's Watershed Impacts.

As an alternative to the current hydromodification scheme, the Permit could adopt an approach to hydromodification that would both prioritize on-site infiltration measures while recognizing that hydromodification "disrupts… natural watershed hydrologic processes."[80]

Some Copermittees and the development community have been urging the Regional Board staff to allow developers to proceed directly to regional mitigation projects instead of on-site measures, where the regional mitigation projects would have at least the same water quality benefits. While regional mitigation projects may have great benefits for the watershed, they should only be allowed in limited circumstances and with certain safeguards in place. First, the regional mitigation project should have ***greater*** water quality benefits than full-implementation of on-site infiltration. Second, the mitigation projects must have safeguards to ensure there is sufficient funding to complete the project before any individual developer is off the hook for on-site mitigation. This is important to avoid the situation where a developer "pays in" a few thousand dollars to a multi-million dollar restoration project, but not enough funds are ultimately raised and the project viability is compromised—and hence, the development has never mitigated its impact.

To avoid this, there should be a time-limit on restoration projects, perhaps through a "Kickstarter" approach. Under this approach, there is a limited amount of time for investors to pledge money for a project. If the monetary goal is raised, the project goes forward and all investors contribute their money. If the project raises insufficient funds, the investors keep their money and must find another project to serve as their mitigation. This approach could also allow Copermittees to pledge money toward the project and then operate the project as a quasi-mitigation bank for developments within the watershed. Another alternative would be for Copermittees to pre-identify and fund regional mitigation opportunities themselves, and then hold these assets in a mitigation bank for sale to developers of future projects.

Also, the Permit could include a requirement to focus not on what is "infeasible," but what is feasible. This approach could foster creativity and get developers, Copermittees, and environmental groups working together on projects to benefit the entire watershed.

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[80] *See* Tentative Order R9-2012-0011 at Attachment C-4.

K. The Permit Should Require the Incorporation of USEPA Green Street Implementation for New or Significant Re-Development throughout the Region.

The Environmental Groups encourages the Regional Board to modify the Permit's Priority Development Program to require the adoption of USEPA Green Streets. As written, the Administrative Draft Permit's Jurisdictional Runoff Management Program Priority Development Project Section states that streets, roads, highways, freeways, and residential driveways with an impervious area greater than 5,000 square feet and is used for transportation purposes is a priority area.[81] The north Orange County MS4 permit adopted by the Santa Ana Regional Board explicitly incorporates USEPA guidance, "Managing Wet Weather with Green Infrastructure: Green Streets."[82] This USEPA guidance is required to be implemented to the MEP.[83]

L. The Permit Should Promote Regular Inspections of Inventoried Existing Development to Ensure Compliance with Applicable Local Ordinances and Permits.

The Administrative Draft Permit establishes a five-year minimum inspection cycle for inventoried existing development along with a requirement of an inspection within six months of any change in property ownership.[84] Copermittees have argued for a weakening of those minimum requirements and indicated a system that would allow for a focusing of resources on those facilities which may be of a higher priority.

The Environmental Groups do not oppose the focusing of scarce resources towards higher priority pollutants or areas, so long as each facility in a Copermittee's jurisdiction is inspected at least once during this Permit term. State Water Resources Control Board audits and private consultants have concluded that industrial and commercial inspections are a necessary component of stormwater permitting. A 2006 Tetra Tech report assessing California's Industrial Storm Water Program contained a central finding stating that "*compliance improves with field inspector presence.*"[85] The report goes onto state, "[r]egulatory presence (1) shows the facility representatives that the [regulator] takes the program seriously and (2) keeps stormwater compliance in the minds of facility representatives."[86]

The proven benefit of a robust inspection program and the relatively modest requirement that each facility is inspected no less than once every five years is not a regulatory burden on the Copermittees. Therefore, the Environmental Groups oppose any material modification to lessen inspection frequency.

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[81] *See* Tentative Order No. R9-2012-0011 at § II.E.3.b.(2)(g).
[82] *See* Order No. R8-2009-0030, as amended by Order No. R8-2010-0062, § XII.B.2.h.
[83] *See id.*
[84] *See* Tentative Order No. R9-2012-0011 at § II.E.5.d.(1)(a).
[85] Assessment Report on Tetra Tech's Support of California's Industrial Stormwater Program, 22 (July 12, 2006).
[86] *Id.*

M. The Permit Should Promote Retrofitting Existing Development as a Primary Strategy to Achieve Water Quality Improvement.

The Administrative Draft Permit appropriately requires each Copermittee to develop a program to retrofit existing development.[87] However, the retrofit sections could be improved by avoiding "orphan" areas and including environmental groups and other stakeholders in retrofit program.

1. Identifying "high priority" areas for implementation runs the risk of abandoning other areas.

Identifying areas that will address high priority water quality concerns seems like a reasonable start. However, as in other sections of the Permit, and consistent with our comments in this letter,[88] we have concerns that this will leave other areas as "orphans" and not result in comprehensive adoption of rebates and other incentives, nor an equitable distribution of the requirements and the resulting benefits to all affected jurisdictions.

2. Environmental groups and other stakeholders should be actively involved in retrofit implementation.

Much like our comments on including environmental organizations and citizen monitoring,[89] we strongly recommend additional language in the Permit to encourage partnerships with non-governmental organizations working on pollution prevention programs for existing development. In other areas of the State, as well as locally, this type of cooperative effort between government and non-government results in reduced costs and increased benefits.

IX. THE ADMINISTRATIVE DRAFT PERMIT'S ENFORCEMENT APPROACH IS APPROPRIATE.

A. The Permit Must Include Enforcement Response Plans to Ensure Improved Water Quality in the Region.

The Administrative Draft Permit's substantive enforcement requirements assist Copermittees to hold accountable dischargers who contribute to water quality standards violations. These enforcement requirements outlined in are appropriate should be retained as-is in the Permit.[90] Strong enforcement provisions are appropriate to encourage Copermittees, industrial and construction dischargers, and the development community to find better and more cost-effective BMPs and alternative methods for achieving water quality standards. The Permit should further strengthen these requirements to address facilities which could fall through the cracks under the Administrative Draft Permit's language.

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[87] *See: See* Tentative Order No. R9-2010-0016 at § II.E. (b)
[88] See eg, Section IV B (5) (F) of this letter.
[89] See eg, Section IV B (1), (2) and (3) of this letter.
[90] *See* Tentative Order No. R9-2010-0016 at § II.E.6

B. The Permit Must Maintain Escalating Enforcement Actions to Ensure Violators of Water Quality Standards Stop Unauthorized Practices.

Increasing enforcement action, like the provisions in E.6, help deter dischargers from compromising water quality.[91] The Permit should retain these requirements; however in our experience Copermittees are too lenient on repeat offenders. Failure to appropriately "ratchet up" enforcement should be considered a failure to comply with these provisions of the Permit.

C. The Permit Should Include Reporting Requirements for Sites Which are Repeatedly Subject to Low Level Enforcement.

The Administrative Draft Permit requires Copermittees to notify the Regional Board after issuing any "high level enforcement action" to a construction site, but there is no similar requirement for sites that receive multiple low level enforcement actions.[92] The Regional Board should be aware of repeat violators not associated with the highest water quality priorities. The Permit should require Copermittees to notify the Regional Board of such dischargers.

D. The Permit Should Require Board Notification for All Violators Subject to High Level Enforcement Actions, Not Only Construction Sites.

The Administrative Draft Permit requires Copermittees to inform the Regional Board after issuing any "high level enforcement action" to a construction site.[93] There is no reason this requirement should only apply to construction sites. The Regional Board should be notified of any discharger subject to high level enforcement. The Regional Board should remove the word "construction" from Provision E.6(d)(1) to correct this issue and include all sites.

E. The Permit Should Require Copermittees to Automatically Notify the Regional Board of Non-Compliant Sites Threatening the Highest Water Quality Priorities Because These Violations are Already Significant.

The Administrative Draft Permit requires Copermittees to report to the Regional Board issuance of a high level enforcement action to a site that poses a "significant threat to water quality."[94] When the site threatens the highest water quality priorities, violations requiring the issuance of high level enforcement actions are already significant because Copermittees have identified these waters as their highest water quality priorities. Therefore, the Regional Board should require Copermittees to automatically notify the Regional Board of any high level enforcement action issued that affects the highest water quality priorities.

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[91] *See* Tentative Order No. R9-2010-0016 at E.6(a)(2)-(3), (b)(4), and (c)(3).
[92] *See* Tentative Order No. R9-2010-0016 at E.6(d).
[93] *See* Tentative Order No. R9-2010-0016 at E.6(d)(1).
[94] *See* Tentative Order No. R9-2010-0016 at E.6(d)(1).

F. The Permit Must Preserve the Enforcement Requirements for Violations of Highest Water Quality Priorities.

It is proper for the permit to require Copermittees to automatically start enforcement at high level for any violation that threatens or potentially threatens the highest water quality priorities.[95]

G. The Permit Should Modify Reporting Requirements for Continued Exceedances of Water Quality Standards to Encourage Copermittees to Take Initiative in Finding Exceedances.

The Administrative Draft Permit currently requires Copermittees to submit updates on their Water Quality Improvement Plans when either the Copermittee or the Regional Board determines that discharges from the facility are causing or contributing to an exceedance.[96] The Permit could facilitate better practices by the Copermittees if this requirement were changed to reward the efforts of Copermittees that seek out troublesome discharges on their own.

X. THE PERMIT'S REPORTING PROVISIONS MUST BE STRENGTHENED TO ENSURE MEANINGFUL PUBLIC PARTICIPATION.

A. The Permit Must Require More Detailed Annual Reporting than Proposed in the Administrative Draft Permit.

The Administrative Draft Permit modifies the existing reporting standards for Copermittees' and significantly reduced the volume of data that must be disclosed to a double-sided, single page form.[97] For many of the Copermittees' actions, the form only requires the disclosure of the number of times an action occurred (e.g. number of non-storm water discharges eliminated), without any details regarding the discharges or what actions were taken to fix them.

The Regional Board, Copermittees and the Environmental Groups agree that valuable and scarce resources should not be spent on the completion and submission of reports that do not provide value equal to the amount of time spent in preparing the reports. However, Annual Reports provide a mechanism to public agencies to reflect on their performance over the past twelve months and a shortened report may negatively impact the ability of these agencies to fully calculate the effectiveness of their programs. The Environmental Groups encourage the Regional Board to revise the Annual Report requirements to include a more robust analysis of the Copermittees' programs. This modification may allow Copermittees to incorporate cross-references to other documents to avoid additional costs of Annual Report preparation.

B. The Permit Should Require Copermittees to Submit Water Quality Data to CEDEN.

The Administrative Draft Permit requires Copermittees to submit their water quality monitoring data to the California Environmental Data Exchange Network (CEDEN). This requirement is

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[95] *See* Tentative Order No. R9-2012-0011 at E.6(a)(2)(a) and (c)(3).
[96] *See* Tentative Order R9-2012-0011 § II.A.4(a)(1).
[97] *See* Tentative Order No. R9-2010-0016 at F.3(b)(2).

important because it ensures that CEDEN will become a comprehensive source of water quality data for the region.

C. The Regional Clearinghouse Could Become an Important Tool To Increase Transparency.

The Administrative Draft Permit requires the Copermittees to develop, update and maintain an internet-based Regional Clearinghouse to serve as a collection point for Water Quality Improvement Plans, Annual Reports, jurisdictional runoff management program document, monitoring data, and any other edata or information generated through this process.[98] The Regional Clearinghouse has the potential to become a powerful tool to increase transparency and facilitate public participation in developing Water Quality Improvement Plans and jurisdictional programs.

However, the Regional Clearinghouse needs to be set up in a way so that reports and data are easy to locate. The allocation of scarce financial resources dedicated towards collecting information and providing it to the public via a system that is difficult to navigate fails to satisfy the purpose of this or any other permit. The San Diego Copermittees' current website, Project Clean Water, is difficult to navigate and tends to obscure information, rather than make it accessible. Furthermore, unless the public has been made aware of the availability of this tool, few should be expected to access it. Therefore, the Regional Clearinghouse should be prominently displayed on Copermittee's water quality websites and the Regional Board should encourage distribution of information relating to this tool as well as how-to recommendations on reducing water usage to residents. Any and all public information should have contact information, including e-mail and phone numbers, for stormwater program managers for each Copermittee.

D. The Regional Clearinghouse Should Include a Database for Mobile Sources, Along with Each Copermittee's Industrial, Commercial, and Municipal Inventories.

The San Diego Copermittees had been developing a mobile sources database to help track mobile sources across jurisdictions. San Diego Coastkeeper was particularly interested in making that information publicly accessible in order to assist jurisdictions in holding mobile sources accountable. Unfortunately, the San Diego Copermittees refused to make the database publicly accessible.

In order to ensure an accurate picture of the potential sources of water quality impairments the Regional Board must provide a comprehensive procedure that allows for concerned members of the public, and the non-profit community that represents them, the ability to assist Copermittees in resolving chronic water quality problems. One of the most effective means of achieving improved water quality are regulations that encourage public involvement in their enforcement.[99] In this instance, the Environmental Groups seek the access to data compiled by public agencies, likely without the financial resources to comprehensively review their data, in order to ensure compliance with this Permit and its stated goal of improved water quality. Therefore, this Permit should require

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[98] *See* Tentative Order No. R9-2012-0011 § II.F.4.

[99] *See* State Water Resources Control Board, Office of Enforcement, Citizen Suit Enforcement under the Federal Clean Water Act: A Snapshot of the California Experience Based on Notices of Intent to Sue March 2009 through June 2010. 7 (May 2011).

the Regional Clearinghouse to include a publicly accessible mobile sources inventory and tracking system as well as each Copermittee's industrial, commercial, and municipal inventories.

E. The Permit Should Require a Best Management Practices Database.

The Clean Water Act requires Copermittees to reduce pollutants in waters discharged to and from the MS4 to the Maximum Extent Practicable ("MEP"). Because the Clean Water Act is a technology-forcing statute, MEP is an ever-evolving standard, forcing better technology and new approaches over time. In order for the Regional Board to assess MEP, the Permit should require the Copermittees to create a publicly accessible BMP database. This will allow Copermittees to share innovative techniques, technology, and practices and help the Regional Board staff and environmental groups to push the Copermittees to "raise the bar" and pursue ever-improving strategies to achieve water quality standards

XI. THE PERMIT MUST ADJUST EARLY ENROLLMENT REQUIREMENTS FOR ORANGE AND RIVERSIDE COUNTIES.

The previous permits from Orange and Riverside counties were not on the same time schedule as the San Diego permit and were not set to expire until 2014 and 2015 respectively. These currently effective permits had requirements for the Copermittees to complete several special studies in addition to the core monitoring requirements. Some of the special studies had implementation dates that have not yet passed.

The Riverside County permit outlines requirements for a Trash and Litter Investigation, and an Agricultural, Federal, and Tribal Input Study which both must be submitted by September 1, 2012, and also an Intermittent and Ephemeral Stream Perennial Conversion Study which must be submitted by April 1, 2013. The current Administrative Draft Permit requires Copermittees to conduct special studies but makes no reference to the past studies that are still pending implementation.

Will these studies no longer be required? Or will this portion of the superseded permits still be in effect? The Permit must adjust the early enrollment requirements for Orange and Riverside counties to ensure these studies are completed even if they undergo early enrollment.

XII. THE PERMIT SHOULD REQUIRE A NARRATIVE FISCAL ANALYSIS.

The Administrative Draft Permit does not require Copermittees to include a narrative description of causes of a 25 percent or greater annual change in any budget line item in the annual reports. The current permits for Riverside and Orange Counties include such a provision.[100] This provision holds Copermittees to a higher standard in their annual analysis while creating accountability to such increases in their budgets. The Permit should include a similar standard.

[100] *See* Order No. R9-2010-0016 at H.2(b); Order No. R9-2009-0002 at H.2(b).

XIII. THE ENVIRONMENTAL GROUPS REQUEST NOTICE.

The Environmental Groups request notice of any further documentation, decisions, findings or actions taken in regards to this matter.

CONCLUSION

In conclusion, the Environmental Groups appreciate the effort the Regional Board and its staff have put towards developing an MS4 permit for the San Diego Region which effectively and efficiently addresses the environmental concerns of the watershed in a transparent and comprehensive approach. We look forward to a constructive relationship with the Regional Board and hope our comments will assist in the development of a thoughtful and progressive permit.

Respectfully submitted,

Jill Witkowski
San Diego Coastkeeper

Colin Kelly
Orange County Coastkeeper

Garry Brown
Inland Empire Waterkeeper

Penny Elia
Save Hobo Aliso

Michael Beanan
South Laguna Civic Association
Laguna Bluebelt Coalition

Livia Borak
Coastal Environmental Rights Foundation

Julia Chunn-Heer
Surfrider Foundation,
San Diego Chapter

Doug Reese
Surfrider Foundation,
South Orange County Chapter

Nicole Capretz
Environmental Health Coalition

Van Collinsworth
Preserve Wild Santee

Debby Knight
Friends of Rose Canyon

ADMINISTRATIVE DRAFT

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

TENTATIVE
ORDER NO. R9-2012-0011
NPDES NO. CAS0109266

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT AND WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM THE MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s) DRAINING THE WATERSHEDS WITHIN THE SAN DIEGO REGION

The San Diego County Copermittees in Table 1a are subject to waste discharge requirements set forth in this Order.

Table 1a. San Diego County Copermittees

City of Carlsbad	City of Oceanside
City of Chula Vista	City of Poway
City of Coronado	City of San Diego
City of Del Mar	City of San Marcos
City of El Cajon	City of Santee
City of Encinitas	City of Solana Beach
City of Escondido	City of Vista
City of Imperial Beach	County of San Diego
City of La Mesa	San Diego County Regional Airport Authority
City of Lemon Grove	Unified Port District of San Diego
City of National City	

The Orange County Copermittees in Table 1b are subject to waste discharge requirements set forth in this Order upon expiration of Order No. R9-2009-0002, NPDES No. CAS0108740 on December 16, 2014.

Table 1b. Orange County Copermittees

City of Aliso Viejo	City of Ranch Santa Margarita
City of Dana Point	City of San Clemente
City of Laguna Beach	City of San Juan Capistrano
City of Laguna Hills	City of Laguna Woods
City of Laguna Niguel	County of Orange
City of Lake Forest	Orange County Flood Control District
City of Mission Viejo	

ADMINISTRATIVE DRAFT

The Riverside County Copermittees in Table 1c are subject to waste discharge requirements set forth in this Order upon expiration of Order No. R9-2010-0016, NPDES No. CAS0108766 on November 10, 2015.

Table 1c. Riverside County Copermittees

City of Murrieta	County of Riverside
City of Temecula	Riverside County Flood Control and Water Conservation District
City of Wildomar	

The Orange County Copermittees and Riverside County Copermittees may enroll under this Order at a date earlier than the expiration date of their current Orders subject to the conditions described in Provision F.6 of this Order and the Copermittees in the respective county receive a Notice of Enrollment (NOE) from the San Diego Water Board.

The term Copermittee in this Order refers to any San Diego County, Orange County, or Riverside County Copermittee enrolled under this Order, unless specified otherwise.

This Order provides permit coverage for the Copermittee discharges described in Table 2.

Table 2. Discharge Locations and Receiving Waters

Discharge Points	Locations throughout San Diego Region
Discharge Description	Municipal Separate Storm Sewer System (MS4) Discharges
Receiving Waters	Inland Surface Waters, Enclosed Bays and Estuaries, and Coastal Ocean Waters of the San Diego Region

Table 3. Administrative Information

This Order was adopted by the San Diego Water Board on:	**Month Day, 2012**
This Order will become effective on:	**Month Day, 2012**
This Order will expire on:	**Month Day, 2017**
The Copermittees must file a Report of Waste Discharge (ROWD) in accordance with Title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than 180 days in advance of the Order expiration date.	

I, David W. Gibson, 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, San Diego Region, on Month Day, 2012.

TENTATIVE

David W. Gibson
Executive Officer

ADMINISTRATIVE DRAFT

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ADMINISTRATIVE DRAFT

I. FINDINGS

The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board), finds that:

JURISDICTION

1. **MS4 Ownership or Operation.** Each of the Copermittees owns or operates an MS4, through which it discharges storm water and non-storm water into waters of the U.S. within the San Diego Region. These MS4s fall into one or more of the following categories: (1) a medium or large MS4 that services a population of greater than 100,000 or 250,000 respectively; or (2) a small MS4 that is "interrelated" to a medium or large MS4; or (3) an MS4 which contributes to a violation of a water quality standard; or (4) an MS4 which is a significant contributor of pollutants to waters of the U.S.

2. **Legal and Regulatory Authority.** This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations (Code of Federal Regulations [CFR] Title 40, Part 122 [40 CFR 122]) adopted by the United States Environmental Protection Agency (USEPA), and chapter 5.5, division 7 of the California Water Code (CWC) (commencing with section 13370). This Order serves as an NPDES permit for discharges from MS4s to surface waters. This Order also serves as waste discharge requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the CWC (commencing with section 13260).

3. **CWA Technology Based Standards and Prohibitions.** Pursuant to CWA section 402(p)(3)(B), NPDES permits for storm water discharges from MS4s must include requirements to effectively prohibit non-storm water discharges into MS4s, and require controls to reduce the discharge of pollutants in storm water to the maximum extent practicable (MEP).

4. **CWA NPDES Permit Conditions.** Pursuant to CWA section 402(a)(2), NPDES permits must prescribe conditions to assure compliance with CWA section 402(p)(3)(B) and 40 CFR 122.26(d)(2)(iv)(B). This Order prescribes conditions to assure compliance with the CWA requirements for owners and operators of MS4s to effectively prohibit non-storm water discharges in to the MS4s, and require controls to reduce the discharge of pollutants in storm water from the MS4s to the MEP.

5. **CWA and CWC Monitoring Requirements.** Pursuant to 40 CFR 122.48, NPDES permits must specify requirements for recording and reporting monitoring results. In addition, CWC sections 13267 and 13383 authorize the San Diego Water Board to require technical and monitoring reports. This Order establishes monitoring and reporting requirements to implement federal and State requirements.

6. **Total Maximum Daily Loads.** CWA section 303(d)(1)(A) requires that "[e]ach state shall identify those waters within its boundaries for which the effluent limitations…are not stringent enough to implement any water quality standard applicable to such waters." The CWA also requires states to establish a priority ranking of impaired water bodies known as Water Quality Limited Segments and to establish Total Maximum Daily Loads (TMDLs) for such waters. This priority list of impaired water bodies is called the Clean Water Act Section 303(d) List of Water Quality Limited Segments, commonly referred to as the 303(d) List. The CWA requires the 303(d) List to be updated every two years. Requirements of this Order implement the TMDLs adopted by the San Diego Water Board and approved by USEPA.

7. **Non-Storm Water Discharges.** Pursuant to CWA section 402(p)(3)(B)(ii), this Order requires each Copermittee to effectively prohibit discharges of non-storm water into its MS4. Nevertheless, non-storm water discharges into and from the MS4s continue to be reported to the San Diego Water Board by the Copermittees and other persons. Monitoring conducted by the Copermittees, as well as the 303(d) List, have identified dry weather, non-storm water discharges from the MS4s as a source of pollutants causing or contributing to receiving water quality impairments in the San Diego Region. The federal regulations [40 CFR 122.26(d)(2)(iv)(B)] require the Copermittees to have a program to prevent all types of non-storm water discharges, or illicit discharges, from entering the MS4. The federal regulations, however, allow for specific categories of non-storm water discharges or flows to be addressed as illicit discharges only where such discharges are identified as sources of pollutants to waters of the U.S.

8. **In-Stream Treatment Systems.** Pursuant to federal regulations [40 CFR 131.10(a)], in no case shall a state adopt waste transport or waste assimilation as a designated use for any waters of the U.S. Authorizing the construction of a runoff treatment facility within a water of the U.S., or using the water body itself as a treatment system or for conveyance to a treatment system, would be tantamount to accepting waste assimilation as an appropriate use for that water body. Runoff treatment must occur prior to the discharge of runoff into receiving waters. Treatment control best management practices (BMPs) must not be constructed in waters of the U.S. or state. Construction, operation, and maintenance of a pollution control facility in a water body can negatively impact the physical, chemical, and biological integrity, as well as the beneficial uses, of the water body.

DISCHARGE CHARACTERISTICS AND RUNOFF MANAGEMENT

9. **Point Source Discharges of Pollutants.** Discharges from the MS4s contain waste, as defined in the CWC, and pollutants that adversely affect the quality of the waters of the state. A discharge from an MS4 is a "discharge of pollutants from a point source" into waters of the U.S. as defined in the CWA. Storm water and non-storm water discharges from the MS4s contain pollutants that cause or threaten to cause a violation of surface water quality standards, as outlined in the Basin Plan. Storm water and non-storm water discharges from the MS4s are subject to the conditions and requirements established in the Basin Plan for point source discharges.

10. **Potential Beneficial Use Impairment.** The discharge of pollutants and/or increased flows from MS4s may cause or threaten to cause the concentration of pollutants to exceed applicable receiving water quality objectives and impair or threaten to impair designated beneficial uses resulting in a condition of pollution, contamination, or nuisance.

11. **Pollutants Generated by Land Development.** Land development has created and continues to create new sources of non-storm water discharges and pollutants in storm water discharges as human population density increases. This brings higher levels of car emissions, car maintenance wastes, municipal sewage, pesticides, household hazardous wastes, pet wastes, and trash. Pollutants from these sources are dumped or washed off the surface by non-storm water or storm water flows into and from the MS4s. When development converts natural vegetated pervious ground cover to impervious surfaces such as paved highways, streets, rooftops, and parking lots, the natural absorption and infiltration abilities of the land are lost. Therefore, runoff leaving a developed area contains greater pollutant loads and is significantly greater in runoff volume, velocity, and peak flow rate than pre-development runoff from the same area.

12. **Runoff Discharges to Receiving Waters.** The MS4s discharge runoff into lakes, drinking water reservoirs, rivers, streams, creeks, bays, estuaries, coastal lagoons, the Pacific Ocean, and tributaries thereto within the eleven hydrologic units comprising the San Diego Region. Numerous receiving water bodies and water body segments have been designated as impaired by the San Diego Water Board pursuant to CWA section 303(d).

13. **Pollutants in Runoff.** The most common pollutants in runoff discharged from the MS4s include total suspended solids, sediment, pathogens (e.g., bacteria, viruses, protozoa), heavy metals (e.g., cadmium, copper, lead, and zinc), petroleum products and polynuclear aromatic hydrocarbons, synthetic organics (e.g., pesticides, herbicides, and PCBs), nutrients (e.g., nitrogen and phosphorus), oxygen-demanding substances (decaying vegetation, animal waste), detergents, and trash.

14. **Human Health and Aquatic Life Impairment.** Pollutants in runoff discharges from the MS4s can threaten and adversely affect human health and aquatic organisms. Adverse responses of organisms to chemicals or physical agents in runoff range from physiological responses such as impaired reproduction or growth anomalies to mortality. Increased volume, velocity, rate, and duration of storm water runoff greatly accelerate the erosion of downstream natural channels. This alters stream channels and habitats and can adversely affect aquatic and terrestrial organisms.

15. **Water Quality Effects.** The Copermittees' water quality monitoring data submitted to date documents persistent exceedances of Basin Plan water quality objectives for runoff-related pollutants at various watershed monitoring stations. Persistent toxicity has also been observed at several watershed monitoring stations. In addition, bioassessment data indicate that the majority of the monitored receiving waters have

Poor to Very Poor Index of Biotic Integrity (IBI) ratings. These findings indicate that runoff discharges are causing or contributing to water quality impairments, and are a leading cause of such impairments in the San Diego Region. Non-storm water discharges from the MS4s have been shown to contribute significant levels of pollutants and flow in arid, developed Southern California watersheds, and contribute significantly to exceedances of applicable receiving water quality objectives.

16. **Non-Storm Water Discharges.** Non-storm water discharges from the MS4s are not considered storm water discharges and therefore are not subject to the MEP standard from CWA 402(p)(3)(B)(iii), which is explicitly for "Municipal … *Stormwater Discharges* (emphasis added)" from the MS4s. Pursuant to CWA 402(p)(3)(B)(ii), non-storm water discharges into the MS4s must be effectively prohibited.

17. **Best Management Practices.** Pollutants can be effectively reduced in runoff by the application of a combination of pollution prevention, source control, and treatment control BMPs. Pollution prevention is the reduction or elimination of pollutant generation at its source and is the best "first line of defense". Source control BMPs (both structural and non-structural) minimize the contact between pollutants and runoff, therefore keeping pollutants onsite and out of receiving waters. Treatment control BMPs remove pollutants that have been mobilized by storm water or non-storm water flows.

18. **BMP Implementation.** Runoff needs to be addressed during the three major phases of development (planning, construction, and use) in order to reduce the discharge of storm water pollutants to the MEP, effectively prohibit non-storm water discharges, and protect receiving waters. Development which is not guided by water quality planning policies and principles can result in increased pollutant load discharges, flow rates, and flow durations which can negatively affect receiving water beneficial uses. Construction sites without adequate BMP implementation result in sediment runoff rates which greatly exceed natural erosion rates of undisturbed lands, causing siltation and impairment of receiving waters. Existing development can generate substantial pollutant loads which are discharged in runoff to receiving waters.

19. **Long Term Planning and Implementation.** Federal regulations require municipal storm water permits to expire 5 years from adoption, after which the permit must be renewed and reissued. The San Diego Water Board recognizes that the degradation of water quality and impacts to beneficial uses of the waters in the San Diego Region occurred over several decades. The San Diego Water Board ~~further recognizes that a decade or more may be necessary to realize~~ expects to see demonstrable improvement to the quality of waters in the Region once Copermittees are given the flexibility to focus resources on addressing priority issues first. This Order includes a long term planning and implementation approach that will require more than a single permit term to ~~complete.~~achieve comprehensive water quality improvements throughout the Region.

WATER QUALITY STANDARDS

20. **Basin Plan.** The San Diego Water Board adopted a Water Quality Control Plan for the San Diego Basin (Basin Plan) on September 8, 1994 that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for receiving waters addressed through the plan. The Basin Plan was subsequently approved by the State Water Resources Control Board (State Water Board) on December 13, 1994. Subsequent revisions to the Basin Plan have also been adopted by the San Diego Water Board and approved by the State Water Board. Requirements of this Order implement the Basin Plan.

    The Basin Plan identifies the following existing and potential beneficial uses for inland surface waters in the San Diego Region: Municipal and Domestic Supply (MUN), Agricultural Supply (AGR), Industrial Process Supply (PROC), Industrial Service Supply (IND), Ground Water Recharge (GWR), Contact Water Recreation (REC1), Non-contact Water Recreation (REC2), Warm Freshwater Habitat (WARM), Cold Freshwater Habitat (COLD), Wildlife Habitat (WILD), Rare, Threatened, or Endangered Species (RARE), Freshwater Replenishment (FRSH), Hydropower Generation (POW), and Preservation of Biological Habitats of Special Significance (BIOL). The following additional existing and potential beneficial uses are identified for coastal waters of the San Diego Region: Navigation (NAV), Commercial and Sport Fishing (COMM), Estuarine Habitat (EST), Marine Habitat (MAR), Aquaculture (AQUA), Migration of Aquatic Organisms (MIGR), Spawning, Reproduction, and/or Early Development (SPWN), and Shellfish Harvesting (SHELL).

21. **Ocean Plan.** The State Water Board adopted the Water Quality Control Plan for Ocean Waters of California, California Ocean Plan (Ocean Plan) in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, and 2005. The State Water Board adopted the latest amendment on April 21, 2005 and it became effective on February 14, 2006. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean. Requirements of this Order implement the Ocean Plan.

    The Ocean Plan identifies the following beneficial uses of ocean waters of the state to be protected: Industrial water supply; water contact and non-contact recreation, including aesthetic enjoyment; navigation; commercial and sport fishing; mariculture; preservation and enhancement of designated Areas of Special Biological Significance; rare and endangered species; marine habitat; fish spawning and shellfish harvesting

22. **Sediment Quality Control Plan**. On September 16, 2008, the State Water Board adopted the Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality (Sediment Quality Control Plan). The Sediment Quality Control Plan became effective on August 25, 2009. The Sediment Quality Control Plan establishes 1) narrative sediment quality objectives for benthic community protection from exposure to contaminants in sediment and to protect human health, and 2) a program of implementation using a multiple lines of evidence approach to interpret

the narrative sediment quality objectives. Requirements of this Order implement the Sediment Quality Control Plan.

23. **National Toxics Rule and California Toxics Rule.** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the National toxics Rule (NTR) applied in California. On May 18, 2000, USEPA adopted the California Toxics Rule (CTR). The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants

24. **Antidegradation Policy.** This Order is in conformance with the federal Antidegradation Policy described in 40 CFR 131.12, and State Water Board Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality Waters in California*. Federal regulations at 40 CFR 131.12 require that the State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The San Diego Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies.

CONSIDERATIONS UNDER FEDERAL LAW

25. **Coastal Zone Act Reauthorization Amendments.** Section 6217(g) of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA) requires coastal states with approved coastal zone management programs to address non-point pollution impacting or threatening coastal water quality. CZARA addresses five sources of non-point pollution: agriculture, silviculture, urban, marinas, and hydromodification. This Order addresses the management measures required for the urban category, with the exception of septic systems. The runoff management programs developed pursuant to this Order fulfill the need for coastal cities to develop a runoff non-point source plan identified in the Non-Point Source Program Strategy and Implementation Plan. The San Diego Water Board addresses septic systems through the administration of other programs.

26. **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 sections 2050 to 2097) or the Federal Endangered Species Act (16 USCA sections 1531 to 1544). This Order requires compliance with receiving water limits, and other requirements to protect the beneficial uses of waters of the State. The Copermittees are responsible for meeting all requirements of the applicable Endangered Species Act.

CONSIDERATIONS UNDER STATE LAW

27. **Unfunded Mandates.** This Order does not constitute an unfunded local government mandate subject to subvention under Article XIIIB, Section (6) of the California Constitution for several reasons, including, but not limited to, the following:

    a. This Order implements federally mandated requirements under CWA section 402. (33 USC 1342(p)(3)(B).)

    b. The local agency Copermittees' obligations under this Order are similar to, and in many respects less stringent than, the obligations of non-governmental and new dischargers who are issued NPDES permits for storm water and non-storm water discharges.

    c. The local agency Copermittees have the authority to levy service charges, fees, or assessments sufficient to pay for compliance with this Order.

    d. The Copermittees have requested permit coverage in lieu of compliance with the complete prohibition against the discharge of pollutants contained in CWA section 301(a) (33 USC 1311(a)) and in lieu of numeric restrictions on their MS4 discharges (i.e. effluent limitations).

    e. 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 XIIIB, Section (6) of the California Constitution.

    f. The provisions of this Order to implement TMDLs are federal mandates. The CWA requires TMDLs to be developed for water bodies that do not meet federal water quality standards. (33 USC 1313(d).) Once the USEPA or a state develops a TMDL, federal law requires that permits must contain effluent limitations consistent with the assumptions and requirements of any applicable wasteload allocation. (40 CFR 122.44(d)(1)(vii)(B).)

28. **California Environmental Quality Act.** The issuance of WDRs and an NPDES permit for the discharge of runoff from MS4s to waters of the U.S. is exempt from the requirement for preparation of environmental documents under the California Environmental Quality Act (CEQA) (Public Resources Code, Division 13, Chapter 3, section 21000 et seq.) in accordance with CWC section 13389.

STATE WATER BOARD DECISIONS

29. **Compliance with Prohibitions and Limitations.** The receiving water limitation language specified in this Order is consistent with language recommended by the USEPA and established in State Water Board Order WQ-99-05, *Own Motion Review of the Petition of Environmental Health Coalition to Review Waste Discharge Requirements Order No. 96-03, NPDES Permit No. CAS0108740*, adopted by the State Water Board on June 17, 1999. The receiving water limitation language in this Order requires compliance with water quality standards, which for storm water discharges is to be achieved through an iterative approach requiring the

implementation of improved and better-tailored BMPs over time. Implementation of the iterative approach to comply with receiving water limitations based on applicable water quality standards is necessary to ensure that storm water discharges from the MS4 ultimately will not cause or contribute to violations of water quality standards and the creation of conditions of pollution, contamination, or nuisance.

30. **Special Conditions for Areas of Special Biological Significance.** On March 20, 2012, the State Water Board approved Resolution No. 2012-001**X** approving an exception to the Ocean Plan prohibition against discharges to Areas of Special Biological Significance (ASBS) for certain nonpoint source discharges and NPDES permitted municipal storm water discharges. The Resolution requires monitoring and testing of marine aquatic life and water quality in several ASBS to protect California's coastline during storms when rain water overflows into coastal waters. Specific terms, prohibitions, and special conditions were adopted to provide special protections for marine aquatic life and natural water quality in ASBSs. The City of San Diego's municipal storm water discharges to the San Diego Marine Life Refuge in La Jolla, and the City of Laguna Beach's municipal storm water discharges to the Heisler Park ASBS are subject terms and conditions of the Resolution. The Special Protections contained in Attachment B to the Resolution applicable to these discharges are hereby incorporated in this Order as if fully set forth herein.

ADMINISTRATIVE FINDINGS

31. **Executive Officer Delegation of Authority.** The San Diego Water Board by prior resolution has delegated all matters that may legally be delegated to its Executive Officer to act on its behalf pursuant to CWC section 13223. Therefore, the Executive Officer is authorized to act on the San Diego Water Board's behalf on any matter within this Order unless such delegation is unlawful under CWC section 13223 or this Order explicitly states otherwise.

32. **Standard Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 122.42, are provided in Attachment B to this Order.

33. **Fact Sheet.** The Fact Sheet for this Order contains background information, regulatory and legal citations, references and additional explanatory information and data in support of the requirements of this Order. The Fact Sheet is hereby incorporated into this Order and constitutes part of the Findings of this Order.

34. **Public Notice.** The San Diego Water Board notified the Copermittees, and interested agencies and persons of its intent to prescribe WDRs for MS4 discharges of pollutants to waters of the U.S. and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet.

35. **Public Hearing.** The San Diego Water Board held a public hearing on Month Day, 2012 and heard and considered all comments pertaining to the terms and conditions of this Order. Details of the public hearing are provided in the Fact Sheet.

II. PROVISIONS

THEREFORE, IT IS HEREBY ORDERED that the Copermittees, in order to meet the provisions contained in division 7 of the CWC and regulations adopted thereunder, and the provisions of the CWA and regulations adopted thereunder, must each comply with the following:

A. PROHIBITIONS AND LIMITATIONS

The purpose of this provision is to describe the conditions under which storm water and non-storm water discharges into and from MS4s are prohibited or limited. The goal of this provision is to protect, preserve, enhance, and restore the water quality and designated beneficial uses of waters of the state. This goal will be accomplished through implementation of control measures that effectively prohibit non-storm water discharges into and from the Copermittees' MS4s, and reduce pollutants in storm water discharges from the Copermittees' MS4s to the MEP.

1. Discharge Prohibitions

a. Discharges into and from MS4s in a manner causing, or threatening to cause, a condition of pollution, contamination, or nuisance in receiving waters of the state are prohibited.

b. Non-storm water discharges into and from MS4s are prohibited, unless such discharges are either authorized by a separate NPDES permit, or the discharge is a category of non-storm water discharges or flows that must be addressed pursuant to Provisions E.2.a.(1)-(5) of this Order.

c. Discharges from MS4s are subject to all waste discharge prohibitions in the Basin Plan, included in Attachment A to this Order.

d. Discharges from MS4s to ASBS are prohibited. Storm water discharges from the City of San Diego's MS4 to the San Diego Marine Life Refuge in La Jolla, and the City of Laguna Beach's MS4 to the Heisler Park ASBS are authorized under this Order subject to the Special Protections contained in Attachment B to State Water Board Resolution No. 2012-001**X** applicable to these discharges, included in Attachment A to this Order.

2. Receiving Water Limitations

a. Discharges from MS4s must not cause or contribute to the violation of water quality standards in any receiving waters, including but not limited to all applicable provisions contained in:

(1) The San Diego Water Board's Basin Plan, including beneficial uses, water quality objectives, and implementation plans;

(2) State Water Board plans for water quality control including the following:

(a) Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries (Thermal Plan), and

(b) The Ocean Plan, including beneficial uses, water quality objectives, and implementation plans;

(3) State Water Board policies for water and sediment quality control including the following:

(a) Water Quality Control Policy for the Enclosed Bays and Estuaries of California,

(b) Sediment Quality Control Plan which includes the following narrative objectives:

(i) Pollutants in sediments shall not be present in quantities that, alone or in combination, are toxic to benthic communities, and

(ii) Pollutants shall not be present in sediments at levels that will bioaccumulate in aquatic life to levels that are harmful to human health,

(c) The Statement of Policy with Respect to Maintaining High Quality of Waters in California (State Water Board Resolution No. 68-16).

(4) Priority pollutant criteria promulgated by the USEPA through the following:

(a) National Toxics Rule (NTR)[1] (promulgated on December 22, 1992 and amended on May 4, 1995), and

(b) California Toxics Rule (CTR)[2,3]

b. Discharges from MS4s composed of storm water runoff must not alter natural ocean water quality in an ASBS.

c. Discharges from MS4s must not cause or contribute to the violation of any receiving water limitations expressed as water quality based effluent limitations (WQBELs) required to meet the WLAs established for the TMDLs in Attachment E to this Order, pursuant to the applicable TMDL compliance schedules.

[1] 40 CFR 131.36
[2] 65 Federal Register 31682-31719 (May 18, 2000), adding Section 131.38 to 40 CFR
[3] If a water quality objective and a CTR criterion are in effect for the same priority pollutant, the more stringent of the two applies.

3. Effluent Limitations

a. Pollutants in storm water discharges from MS4s must be reduced to the MEP.[4]

b. Pollutants in discharges from MS4s must be reduced to comply with any effluent limitations expressed as WQBELs required to meet the WLAs established for the TMDLs in Attachment E to this Order, pursuant to the applicable TMDL compliance schedules.

4. Compliance with Discharge Prohibitions and Receiving Water Limitations

Each Copermittee must comply with the discharge prohibitions and receiving water limitations of this Order through timely implementation of control measures and other actions as specified in Provisions B and E of this Order, including any modifications.

a. If exceedance(s) of water quality standards persist in receiving waters notwithstanding implementation of this Order, the Copermittees must comply with the following procedures:

(1) Upon a determination by ~~either~~ the Copermittees ~~or the San Diego Water Board~~ that discharges from the MS4 are causing or contributing to an exceedance of an applicable water quality standard, the Copermittees must submit the following updates to the Water Quality Improvement Plan required under Provision B as part of the Annual Report required under Provision F.3.b, unless the San Diego Water Board directs an earlier submittal:

(a) The water quality improvement strategies being implemented that are effective and will continue to be implemented;

(b) Additional water quality improvement strategies (i.e. BMPs, retrofitting projects, stream and/or habitat rehabilitation or restoration projects) that will be implemented to reduce or eliminate any pollutants or conditions that are causing or contributing to the exceedance of water quality standards;

(c) Updates to the schedule for implementation of the existing and additional water quality improvement strategies; and

(d) Updates, when necessary, to the schedule for achieving compliance with the discharge prohibitions and receiving water limitations of this Order;

[4] This does not apply to MS4 discharges which receive subsequent treatment to reduce pollutants in storm water discharges to the MEP prior to entering receiving waters (e.g., low flow diversions to the sanitary sewer). Runoff treatment must occur prior to the discharge of runoff into receiving waters per Finding 8.

(2) Upon a determination by the San Diego Water Board that discharges from the MS4 are causing or contributing to an exceedance of an applicable water quality standard (that was not identified pursuant to A.4(a)(1)), the Copermittees must submit the updates required under Provision A.4(a)(1)(a)-(d) to the Water Quality Improvement Plan required under Provision B within 30 days, unless the San Diego Water Board directs a later submittal:

(3)

~~(2)~~(4) The San Diego Water Board may require the incorporation of additional modifications to the Water Quality Improvement Plan required under Provision B. The applicable Copermittees must submit any modifications to the update to the Water Quality Improvement Plan within 30 days of notification that additional modifications are required by the San Diego Water Board, or as otherwise directed;

~~(3)~~(5) Within 30 days of the San Diego Water Board determination that the update to the Water Quality Improvement Plan meets the requirements of this Order, the Copermittees must revise the jurisdictional runoff management program documents to incorporate the updated water quality improvement strategies that have been and will be implemented, the implementation schedule, and any additional monitoring required; and

~~(4)~~(6) The Copermittees must implement the revised jurisdictional runoff management programs and updated jurisdictional monitoring and assessment component of the Water Quality Improvement Plan.

b. The Copermittees must repeat the procedure set forth above to comply with discharge prohibitions and receiving water limitations of this Order for continuing or recurring exceedances of the same water quality standard(s) following implementation of scheduled actions unless directed to do otherwise by the San Diego Water Board.

c. Nothing in Provisions A.4.a and A.4.b prevents the San Diego Water Board from enforcing any provision of this Order while the applicable Copermittees prepare and implement the above update to the Water Quality Improvement Plan and jurisdictional runoff management programs.

B. WATER QUALITY IMPROVEMENT PLANS

The purpose of this provision is to develop Water Quality Improvement Plans that guide the Copermittees' jurisdictional runoff management program implementation efforts towards achieving the outcome of improved water quality in MS4 discharges and receiving waters. The goal of the Water Quality Improvement Plan is to ~~attain the reasonable~~ best protect~~ion~~, preserv~~eation~~, enhance~~ment~~, and restor~~eation of~~ water quality and designated beneficial uses of waters of the state. This goal will be accomplished through an adaptive planning and management process that identifies the highest water quality priorities within a watershed and implements strategies, control measures, and BMPs to achieve improvements in the quality of discharges from the MS4s and receiving waters.

The Copermittees must develop Water Quality Improvement Plans that 1) prioritize water quality issues resulting from discharges to and from the MS4s within each Watershed Management Area, 2) identify pollutant sources and other stressors associated with those water quality priorities, 3) define numeric targets and schedules to achieve improvement of water quality priorities, 4) describe water quality improvement strategies to achieve numeric targets, and 5) execute a coordinated monitoring and assessment program to determine progress towards achieving improved water quality.

The Copermittees must implement all the requirements of Provision B no later than 12 months after the adoption of this Order, or in accordance with Provision F.5.a of this Order.

1. Watershed Management Areas

The Copermittees must develop Water Quality Improvement Plans for each of the Watershed Management Areas in Table B-1. A total of nine Water Quality Improvement Plans must be developed for the San Diego Region.

Table B-1. Watershed Management Areas

Watershed Management Area	Hydrologic Unit(s)	Major Surface Water Bodies	Responsible Copermittees
South Orange County	San Juan (901.00)	Aliso Creek San Juan Creek San Mateo Creek Pacific Ocean	- City of Aliso Viejo[1] - City of Dana Point[1] - City of Laguna Beach[1] - City of Laguna Hills[1] - City of Laguna Niguel[1] - City of Laguna Woods[1] - City of Lake Forest[1] - City of Mission Viejo[1] - City of Rancho Santa Margarita[1] - City of San Clemente[1] - City of San Juan Capistrano[1] - County of Orange[1] - Orange County Flood Control District[1]

ADMINISTRATIVE DRAFT

Table B-1. Watershed Management Areas

Watershed Management Area	Hydrologic Unit(s)	Major Surface Water Bodies	Responsible Copermittees
Santa Margarita River	Santa Margarita (902.00)	Murrieta Creek Temecula Creek Santa Margarita River Santa Margarita Lagoon Pacific Ocean	- City of Murrieta[2] - City of Temecula[2] - City of Wildomar[2] - County of Riverside[2] - County of San Diego[3] - Riverside County Flood Control and Water Conservation District[2]
San Luis Rey River	San Luis Rey (903.00)	San Luis Rey River San Luis Rey Estuary Pacific Ocean	- City of Escondido - City of Oceanside - City of Vista - County of San Diego
Carlsbad	Carlsbad (904.00)	Buena Vista Lagoon Agua Hedionda Lagoon Batiquitos Lagoon San Elijo Lagoon Pacific Ocean	- City of Carlsbad - City of Encinitas - City of Escondido - City of Oceanside - City of San Marcos - City of Solana Beach - City of Vista - County of San Diego
San Dieguito River	San Dieguito (905.00)	San Dieguito River San Dieguito Lagoon Pacific Ocean	- City of Del Mar - City of Escondido - City of Poway - City of San Diego - City of Solana Beach - County of San Diego
Penasquitos	Penasquitos (906.00)	Los Penasquitos Lagoon Mission Bay Pacific Ocean	- City of Del Mar - City of Poway - City of San Diego - County of San Diego
San Diego River	San Diego (907.00)	San Diego River Pacific Ocean	- City of El Cajon - City of La Mesa - City of Poway - City of San Diego - City of Santee - County of San Diego
San Diego Bay	Pueblo San Diego (908.00) Sweetwater (909.00) Otay (910.00)	Sweetwater River Otay River San Diego Bay Pacific Ocean	- City of Chula Vista - City of Coronado - City of Imperial Beach - City of La Mesa - City of Lemon Grove - City of National City - City of San Diego - County of San Diego - San Diego County Regional Airport Authority - Unified Port of San Diego
Tijuana River	Tijuana (911.00)	Tijuana River Tijuana Estuary Pacific Ocean	- City of Imperial Beach - City of San Diego - County of San Diego

Notes:
1. The Orange County Copermittees will be enrolled under this Order upon expiration of Order No. R9-2009-0002, or earlier if the Orange County Copermittees meet the conditions in Provision F.6.
2. The Riverside County Copermittees will be enrolled under this Order upon expiration of Order No. R9-2010-0016, or earlier if the Riverside County Copermittees meet the conditions in Provision F.6.
3. The County of San Diego will not be required to implement the requirements of Provision B for the Santa Margarita River Watershed Management Area until the Riverside County Copermittees are enrolled under this Order. Until then, the County of San Diego is responsible for implementing and complying with the requirements of Provisions D.1, D.4.a.(1)&(3), E, F.2.a-b, F.3.b, and F.4 for the areas of the Santa Margarita River Watershed Management Area within its jurisdiction.

2. Identification of Water Quality Priorities

The Copermittees must identify the water quality priorities within each Watershed Management Area that will be addressed by the Water Quality Improvement Plan. Where appropriate, Watershed Management Areas may be separated into subwatersheds to focus water quality prioritization and jurisdictional runoff management program implementation efforts by receiving water.

a. Assessment of Receiving Water Conditions

The Copermittees must review pollutant sources, discharges, and receiving water conditions and assess the following, at a minimum, to determine the degree of adverse impacts to receiving water beneficial uses:

(1) Receiving waters listed as impaired on the CWA Section 303(d) List of Water Quality Limited Segments (303(d) List);

(2) TMDLs adopted and under development by the San Diego Water Board;

(3) Receiving waters recognized as sensitive or highly valued by the Copermittees, including estuaries designated under the National Estuary Program under CWA section 320, wetlands defined by the State or U.S. Fish and Wildlife Service's National Wetlands Inventory as wetlands, and receiving waters identified as ASBS subject to the provisions of Attachment B to State Water Board Resolution No. 2012-001**X** (Attachment A);

(4) Water quality standards established in the Basin Plan;

(5) Known historical versus current physical, chemical, and biological water quality conditions;

(6) All available physical, chemical, and biological receiving water monitoring data, including data produced by third parties. Data to be considered shall ~~including~~include, but is not limited to, data describing:

(a) Chemical constituents;

(b) Water quality parameters (i.e. pH, temperature, conductivity, etc.);

(c) Toxicity Identification Evaluations for both receiving water column and sediment;

(d) Trash impacts;

(e) Bioassessments; and

(f) Physical habitat.

(7) Available evidence of erosional impacts in receiving waters due to accelerated flows (i.e. hydromodification); and

(8) Available evidence of adverse impacts to the chemical, physical, and biological integrity of receiving waters.

To ensure that Copermittees consider all available data when identifying priorities, Copermittees must make a call for data. The call for data must solicit third party water monitoring data and other evidence from the public regarding available evidence of adverse impacts to the chemical, physical, and biological integrity of receiving waters. The Copermittees must allow the public at least 30 days to submit data and information for consideration.

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b. IDENTIFY PRIORITY POLLUTANTS AND RECEIVING WATER CONDITIONS

The Copermittees must use the information gathered in Provision B.2.a. to develop a list of water quality priorities as pollutants and/or receiving water conditions that are the highest threat to water quality or that most adversely affect the physical, chemical, and biological integrity of receiving waters. The Copermittees must identify the highest water quality priorities to be addressed by the Water Quality Improvement Plan.

After developing the list of water quality priorities, the Copermittees must submit the proposed list, along with data supporting the list, to the Regional Board for a 30 day review and comment period for the public and Regional Board staff.

c. POLLUTANT SOURCE AND/OR STRESSOR IDENTIFICATION

The Copermittees must identify known and suspected storm water and non-storm water pollutant sources and any other stressors causing or contributing to the highest water quality priorities. The identification of known and suspected sources of the highest water quality priorities as identified for Provision B.2.b must consider the following:

(1) Pollutant generating facilities or areas within the Watershed Management Area, including:

(a) Each Copermittee's inventory of construction, municipal, commercial, industrial, and residential facilities, areas, and/or activities,

(b) Publicly owned parks and/or recreational areas,

(c) Open space areas,

(d) All currently operating or closed municipal landfills or other treatment, storage or disposal facilities for municipal waste, and

(e) Areas not within the Copermittees' jurisdictions (e.g., tribal lands, state lands, federal lands) that may be pollutant sources related to the highest water quality priorities within the Watershed Management Area;

(2) Locations of the Copermittees' MS4s, including the following:

(a) All MS4 outfalls that discharge to receiving waters, and

(b) Locations of major structural controls for storm water and non-storm water (e.g., retention basins, detention basins, major infiltration devices, etc.);

(3) Other known and suspected sources of non-storm water or pollutants in storm water discharges to receiving waters within the Watershed Management Area, including the following:

(a) Other MS4 outfalls (e.g., Phase II Municipal and Caltrans),

(b) Other NPDES permitted discharges,

(c) Any other discharges that may be considered point sources (e.g., private outfalls), and

(d) Any other discharges that may be considered non-point sources (e.g., agriculture, wildlife or other natural sources);

(4) Review of available data, including but not limited to:

(a) Findings from the Copermittees' illicit discharge detection and elimination programs,

(b) Findings from the Copermittees' MS4 outfall monitoring,

(c) Findings from the Copermittees' receiving water monitoring,

(d) Findings from the Copermittees' MS4 discharges and receiving water assessments, and

(e) Any other available data, information, or studies related to pollutant sources and conditions that contribute to the highest water quality priorities as identified for Provision B.2.b.

To ensure that Copermittees consider all available information when identifying pollutant sources and stressors, Copermittees must make a call for information. The call for data must solicit information from the public regarding known and suspected sources. The Copermittees must allow the public at least 90 days to submit data and information for

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consideration.

After developing the list of pollutant sources, the Copermittees must submit the proposed list, along with data supporting it, to the Regional Board for a 30 day review and comment period for the public and Regional Board staff.

~~(e)~~

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d. NUMERIC TARGETS AND SCHEDULES

The Copermittees must develop and incorporate interim and final numeric targets[5] and schedules into the Water Quality Improvement Plans. Numeric targets and schedules must be used to measure progress towards addressing the highest water quality priorities and an ultimate outcome of protections, preservation, enhancement, and restoration of receiving water beneficial uses. When developing numeric targets and corresponding schedules, the Copermittees must consider the following:

[5] Interim and final numeric targets may take a variety of forms such as pollutant concentration, load reductions, number of impaired water bodies delisted from the List of Water Quality Impaired Segments, Index of Biotic Integrity (IBI) scores, or other appropriate metrics. Interim and final numeric targets are not necessarily limited to one criterion or indicator, but may include multiple criteria and/or indicators. The final goals must be linked to applicable water quality criteria.

(1) Final numeric targets must be based on measureable criteria or indicators, to be achieved in the receiving waters and/or MS4 discharges for the highest water quality priorities which will result in the restoration and/or protection of water quality standards in receiving waters;

(2) Interim numeric targets must be based on measureable criteria or indicators that can demonstrate incremental progress toward achieving the final numeric targets in the receiving waters and/or MS4 discharges; and

(3) Schedules must be adequate for measuring progress toward achieving the interim and final numeric targets required for Provisions B.2.d.(1) and B.2.d.(2). Schedules must incorporate the following:

(a) Interim dates for achieving the interim numeric targets,

(b) Compliance schedules for any applicable TMDLs in Attachment E to this Order,

(c) Compliance schedules for any ASBS subject to the provisions of Attachment B to State Water Board Resolution No. 2012-001**X** (see Attachment A),

(d) Achievement of the final numeric targets in the receiving waters and/or MS4 discharges for the highest water quality priorities must be as soon as possible, and

(e) Final dates for achieving the final numeric targets must not extend more than 10 years beyond the date this Order is adopted, unless the schedule includes an applicable TMDL in Attachment E to this Order.

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After developing the numeric targets, the Copermittees must submit the proposed list to the Regional Board for a 30 day review and comment period for the public and Regional Board staff.

Each Copermittee will be jointly and severally responsible for achieving the numeric targets.

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3. Water Quality Improvement Strategies and Schedules

The Copermittees must develop specific water quality improvement strategies to address the highest water quality priorities identified within a Watershed Management Area. The water quality improvement strategies must address the highest water quality priorities by preventing or eliminating non-storm water discharges to and from the MS4, reducing pollutants in storm water discharges from the MS4 to the MEP, and restoring and/or protecting the water quality standards of

receiving waters.

a. WATER QUALITY IMPROVEMENT STRATEGIES

The water quality improvement strategies must prioritize and implement the following measures to achieve the interim and final numeric targets in accordance with the schedules required for Provision B.2.c:

(1) Structural and/or non-structural BMPs that are designed to achieve the interim and final numeric targets in the receiving waters and/or MS4 discharges;

(2) Retrofitting projects for areas of existing development known or suspected to contribute to the highest water quality priorities, and where retrofitting will contribute to reducing or eliminating non-storm water discharges to the MS4 and/or reducing pollutants in storm water discharges from the MS4 to the MEP;

(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; and

(4) Other water quality improvement strategies that will result in preventing or eliminating non-storm water discharges to and from the MS4, reducing pollutants in storm water discharges from the MS4 to the MEP, and restoring and/or protecting the water quality standards of receiving waters.

b. IMPLEMENTATION SCHEDULES

(1) The Copermittees must develop schedules for implementing the water quality improvement strategies identified under Provision B.3.a to achieve the interim and final numeric targets in the receiving waters and/or MS4 discharges for the highest water quality priorities in the Watershed Management Area. Schedules must be developed for both the water quality improvement strategies implemented by each Copermittee within its jurisdiction and for strategies that will be implemented by multiple Copermittees on a collaborative basis.

(2) The Copermittees must incorporate the implementation compliance schedules for any ASBS subject to the provisions of Attachment B to State Water Board Resolution No. 2012-001**X** (see Attachment A).

After developing the strategies and schedules, the Copermittees must submit the proposed list to the Regional Board for a 30 day review and comment period for

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the public and Regional Board staff.

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4. Water Quality Improvement Monitoring and Assessment

The Copermittees in each Watershed Management Area must develop an integrated program to assess the progress toward achieving the numeric targets and schedules, and the progress toward addressing the highest water quality priorities for each Watershed Management Area. The water quality improvement monitoring and assessment program must include the monitoring and assessment requirements of Provision D. For Watershed Management Areas with applicable TMDLs, the water quality monitoring and assessment program must incorporate the specific monitoring and assessment requirements of Attachment E. For Watershed Management Areas with any ASBS, the water quality monitoring and assessment program must also incorporate the monitoring requirements of Attachment B to State Water Board Resolution No. 2012-001**X** (see Attachment A).

5. Adaptive Management Process

a. WATER QUALITY IMPROVEMENT PLAN ADAPTIVE MANAGEMENT PROCESS

(1) The Copermittees in each Watershed Management Area must implement the iterative process, at least once every 2~~3~~ years, adapting the Water Quality Improvement Plan to become more effective, based on, but not limited to the following considerations:

(a) Achieving the outcome of improved water quality in MS4 discharges and receiving waters through implementation of the water quality improvement strategies identified in the Water Quality Improvement Plan;

(b) Progress toward achieving interim and final numeric targets in receiving waters and/or MS4 discharges for the highest water quality priorities in the Watershed Management Area,

(c) Appropriateness of the highest water quality priorities identified for the Watershed Management Area;

(d) Progress toward achieving outcomes according to established schedules;

(e) Spatial and temporal accuracy of monitoring data collected to inform prioritization of water quality problems and implementation measures to address the highest water quality problems;

(f) Availability of new information and data from sources other than the jurisdictional runoff management programs within the Watershed Management Area that informs the effectiveness of the actions

implemented by the Copermittees;

(g) San Diego Water Board recommendations; and

(h) Recommendations for modifications to the Water Quality Improvement Plan solicited through a public participation process.

(2) Based on the results of the iterative process required pursuant to Provision B.5.a.(1), the Copermittees must report any modifications necessary to improve the effectiveness of the Water Quality Improvement Plan in the Annual Report required pursuant to Provision F.3.b, or as part of the Report of Waste Discharge (ROWD) required pursuant to Provision F.5.b.

(3) The Copermittees must implement any modifications to the Water Quality Improvement Plan in accordance with the schedules developed pursuant to Provisions B.2.d and B.3.b, unless directed otherwise by the San Diego Water Board.

b. JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM ADAPTIVE MANAGEMENT PROCESS

(1) Each Copermittee in the Watershed Management Area must implement the iterative process, at least annually, adapting its jurisdictional runoff management program to become more effective, based on, but not limited to the following:

(a) Measurable or demonstrable reductions of non-storm water discharges to and from each Copermittee's MS4;

(b) Measurable or demonstrable reductions of pollutants in storm water discharges from each Copermittee's MS4 to the MEP;

(c) Efficiency in implementing the Water Quality Improvement Plan;

(d) San Diego Water Board recommendations; and

(e) Recommendations for modifications to each Copermittee's jurisdictional runoff management program solicited through a public participation process.

(2) Based on the results of the iterative process required pursuant to Provision B.5.b.(1), each Copermittee must report any modifications necessary to improve the effectiveness its jurisdictional runoff management program document in the Annual Report required pursuant to Provision F.3.b, or as part of the ROWD required pursuant to Provision F.5.b.

(3) Each Copermittee must implement any modifications to its jurisdictional runoff

management program in accordance with the schedules developed pursuant to Provisions B.2.d and B.3.b, unless directed otherwise by the San Diego Water Board.

6. Water Quality Improvement Plan Implementation

The Copermittees must commence with implementation of the Water Quality Improvement Plan ~~no later than 180 days~~immediately after approval by ~~after submission, unless otherwise directed in writing by~~ the San Diego Water Board after a public hearing.

C. ACTION LEVELS

The purpose of this provision is for the Copermittees to incorporate numeric non-storm water and storm water action levels in the Water Quality Improvement Plans. The action levels will be used to measure progress towards ~~attaining the reasonable~~best ~~protection~~protecting, ~~preservation~~preservating, enhanc~~emen~~ing~~t~~, and restoring ~~ation of~~ water quality and designated beneficial uses of waters of the state. This goal will be accomplished through monitoring and assessing the quality of the MS4 discharges during the implementation of the Water Quality Improvement Plans.

The Copermittees must incorporate numeric action levels in the Water Quality Improvement Plans to direct and focus the Copermittees' jurisdictional runoff management program implementation efforts for addressing MS4 discharges to receiving waters. The numeric action levels will be used as part of the MS4 discharges assessments required under Provision D.4.a, and each Copermittee's program to detect and eliminate non-storm water and illicit discharges to the MS4 required under Provision E.2. Numeric action levels must be developed for non-storm water and storm water MS4 discharges, as follows:

1. Non-Storm Water Action Levels

a. The following non-storm water action levels (NALs) must be incorporated in the Water Quality Improvement Plan:

(1) Non-Storm Water Discharges from MS4s to Ocean Surf Zone

Table C-1. Non-Storm Water Action Levels for Discharges from MS4s to Ocean Surf Zone

Parameter	Units	AMAL	MDAL	Instantaneous Maximum	Basis
Total Coliform	MPN/100 ml	1,000	-	10,000/1,000[1]	OP
Fecal Coliform	MPN/100 ml	200[2]	-	400	OP
Enterococci	MPN/100 ml	35	-	104[3]	OP

Abbreviations/Acronyms
AMAL – average monthly action level
MDAL – maximum daily action level
OP – Ocean Plan water quality objective
MPN/100 ml – most probable number per 100 milliliters

Notes:
1. Total coliform density shall not exceed 1,000 MPN/100 ml when the fecal/total coliform ratio exceeds 0.1
2. Fecal coliform density may not exceed 200 MPN per 100 ml during any 30 day period
3. This value has been set to the Basin Plan water quality objective for saltwater "designated beach areas"

(2) Non-Storm Water Discharges from MS4s to Bays, Harbors, and Lagoons/Estuaries

Table C-2. Non-Storm Water Action Levels for Discharges from MS4s to Bays, Harbors, and Lagoons/Estuaries

Parameter	Units	AMAL	MDAL	Instantaneous Maximum	Basis
Turbidity	NTU	75	-	225	OP
pH	Units	Within limit of 6.0 to 9.0 at all times			OP
Fecal Coliform	MPN/100 ml	200[1]	-	400[2]	BP
Enterococci	MPN/100 ml	35	-	104[3]	BP
Priority Pollutants	ug/L	See Table C-3			

Abbreviations/Acronyms:
AMAL – average monthly action level
MDAL – maximum daily action level
OP – Ocean Plan water quality objective
BP – Basin Plan water quality objective
NTU – Nephelometric Turbidity Units
MPN/100 ml – most probable number per 100 milliliters
ug/L – micrograms per liter

Notes:
1. Based on a minimum of not less than five samples for any 30-day period
2. No more than 10 percent of total samples may exceed 400 MPN per 100 ml during any 30 day period
3. This value has been set to the Basin Plan water quality objective for saltwater "designated beach areas"

Table C-3. Non-Storm Water Action Levels for Priority Pollutants

Parameter	Units	Freshwater (CTR)		Saltwater (CTR)	
		MDAL	AMAL	MDAL	AMAL
Cadmium	ug/L	**	**	16	8
Copper	ug/L	*	*	5.8	2.9
Chromium III	ug/L	**	**	-	-
Chromium VI	ug/L	16	8.1	83	41
Lead	ug/L	*	*	14	2.9
Nickel	ug/L	**	**	14	6.8
Silver	ug/L	*	*	2.2	1.1
Zinc	ug/L	*	*	95	47

Abbreviations/Acronyms:
CTR – California Toxic Rule
ug/L – micrograms per liter
AMAL – average monthly action level
MDAL – maximum daily action level

Notes:
* Action levels developed on a case-by-case basis (see below)
** Action levels developed on a case-by-case basis (see below), but calculated criteria are not to exceed Maximum Contaminant Levels (MCLs) under the California Code of Regulations, Title 22, Division 4, Chapter 15, Article 4, Section 64431

The Cadmium, Copper, Chromium (III), Lead, Nickel, Silver and Zinc NALs for MS4 discharges to freshwater receiving waters will be developed on a case-by-case basis because the freshwater criteria are based on site-specific water quality data (receiving water hardness). For these priority pollutants, the following equations (40 CFR 131.38.b.2) will be required:

Cadmium (Total Recoverable) = exp(0.7852[ln(hardness)] -2.715)
Chromium III (Total Recoverable) = exp(0.8190[ln(hardness)] + .6848)
Copper (Total Recoverable) = exp(0.8545[ln(hardness)] - 1.702)
Lead (Total Recoverable) = exp(1.273[ln(hardness)] - 4.705)
Nickel (Total Recoverable) = exp(.8460[ln(hardness)] + 0.0584)
Silver (Total Recoverable) = exp(1.72[ln(hardness)] - 6.52)
Zinc (Total Recoverable) = exp(0.8473[ln(hardness)] + 0.884)

(3) Non-Storm Water Discharges from MS4s to Inland Surface Waters

Table C-4. Non-Storm Water Action Levels for Discharges from MS4s to Inland Surface Waters

Parameter	Units	AMAL	MDAL	Instantaneous Maximum	Basis
Dissolved Oxygen	mg/L	Not less than 5.0 in WARM waters and not less than 6.0 in COLD waters			BP
Turbidity	NTU	-	20	See MDAL	BP
pH	Units	Within limit of 6.5 to 8.5 at all times			BP
Fecal Coliform	MPN/100 ml	200[1]	-	400[2]	BP
Enterococci	MPN/100 ml	33	-	61[3]	BP
Total Nitrogen	mg/L	-	1.0	See MDAL	BP
Total Phosphorus	mg/L	-	0.1	See MDAL	BP
MBAS	mg/L	-	0.5	See MDAL	BP
Iron	mg/L	-	0.3	See MDAL	BP
Manganese	mg/L	-	0.05	See MDAL	BP
Priority Pollutants	ug/L	See Table C-3			

Abbreviations/Acronyms:
AMAL – average monthly action level
BP – Basin Plan water quality objective
COLD – cold freshwater habitat beneficial use
NTU – Nephelometric Turbidity Units
mg/L – milligrams per liter
MDAL – maximum daily action level
WARM – warm freshwater habitat beneficial use
MBAS – Methylene Blue Active Substances
MPN/100 ml – most probable number per 100 milliliters
ug/L – micrograms per liter

Notes:
1. Based on a minimum of not less than five samples for any 30-day period
2. No more than 10 percent of total samples may exceed 400 MPN per 100 ml during any 30 day period
3. This value has been set to the Basin Plan water quality objective for freshwater "designated beach areas"

b. If not identified in Provision C.1.a, NALs must be identified and incorporated in the Water Quality Improvement Plan for any pollutants or waste constituents causing or contributing, or threatening to cause or contribute to a condition of pollution or nuisance in waters of the state associated with the highest water quality priorities related to non-storm water discharges from the MS4s. NALs must be based on:

(1) Applicable water quality standards which may be dependent upon site-specific or receiving water-specific conditions or assumptions to be identified by the Copermittees; or

(2) Applicable numeric WQBELs required to meet the WLAs established for the TMDLs in Attachment E to this Order.

2. Storm Water Action Levels

a. The following storm water action levels (SALs) for discharges of storm water from the MS4 must be incorporated in the Water Quality Improvement Plan:

Table C-5. Storm Water Action Levels for Discharges from MS4s to Receiving Waters

Parameter	Units	Action Level
Turbidity	NTU	126
Nitrate & Nitrite (Total)	mg/L	2.6
Phosphorus (Total P)	mg/L	1.46
Cadmium (Total Cd)*	µg/L	3.0
Copper (Total Cu)*	µg/L	127
Lead (Total Pb)*	µg/L	250
Zinc (Total Zn)*	µg/L	976

Abbreviations/Acronyms:
NTU – Nephelometric Turbidity Units
mg/L – milligrams per liter
ug/L – micrograms per liter

Notes:
* The sampling must include a measure of receiving water hardness at each MS4 outfall. If a total metal concentration exceeds the corresponding metals SAL in Table C-5, that concentration must be compared to the California Toxics Rule criteria and the USEPA 1-hour maximum concentration for the detected level of receiving water hardness associated with that sample. If it is determined that the sample's total metal concentration for that specific metal exceeds that SAL, but does not exceed the applicable USEPA 1-hour maximum concentration criterion for the measured level of hardness, then the sample result will not be considered as an excursion above the SAL for that measurement.

b. If not identified in Provision C.2.a, SALs must be identified and incorporated in the Water Quality Improvement Plan for pollutants or waste constituents causing or contributing, or threatening to cause or contribute to a condition of pollution or nuisance in waters of the state associated with the highest water quality priorities related to storm water discharges from the MS4s. SALs must be based on:

(1) Federal and State water quality guidance and/or water quality standards; and

(2) Site-specific or receiving water-specific conditions; or

(3) Applicable numeric WQBELs required to meet the WLAs established for the TMDLs in Attachment E to this Order.

c. Wet weather monitoring and assessment data from MS4 outfalls collected in accordance with Provision D.1.b may be used to develop or revise SALs based upon watershed-specific data. Revision of SALs is subject to San Diego Water Board approval.

D. MONITORING AND ASSESSMENT REQUIREMENTS

The purpose of this provision is for the Copermittees to monitor and assess the chemical, physical, and biological impact on receiving waters caused by discharges from the Copermittees' MS4s under wet weather and dry weather conditions. The goal of this provision is to inform the Copermittees about the nexus between the health of receiving waters and the water quality condition of the discharges from their MS4s. This goal will be accomplished through implementing and complying with the monitoring and assessment requirements of this Order.

The Copermittees must implement the following minimum monitoring and assessment requirements:

1. Jurisdictional Monitoring Requirements

a. DRY WEATHER JURISDICTIONAL MONITORING [D.1.a]

For dry weather days,[6] each Copermittee must implement the following minimum monitoring requirements within its jurisdiction:

(1) Non-Storm Water MS4 Monitoring Program [D.1.a.(1)]

Each Copermittee must develop and conduct a program to monitor and characterize non-storm water flows and pollutant loads during dry weather conditions within its jurisdiction. The non-storm water MS4 monitoring program must be utilized to detect and eliminate non-storm water discharges and illicit discharges and connections to the Copermittee's MS4. Any available monitoring data not collected specifically to meet these requirements may be utilized by the Copermittee. The non-storm water MS4 monitoring program must meet the following minimum requirements:

(a) Non-Storm Water MS4 Monitoring Stations [D.1.a.(1)(a)]

Each Copermittee must identify the non-storm water MS4 monitoring stations within its jurisdiction that will be screened and monitored during dry weather days to identify non-storm water discharges and illicit discharges and connections to the MS4. Non-storm water MS4 monitoring stations must be selected in accordance with the following guidelines and criteria:

(i) A grid system consisting of perpendicular north-south and east-west lines spaced ¼ mile apart must be overlayed on a map of the Copermittee's MS4. All cells that contain a segment of the Copermittee's MS4 must be identified;

[6] Dry weather day is defined as any day with less than 0.1 inches of rain observed on each of the previous 3 days.

(ii) At least one non-storm water MS4 monitoring station must be selected in each cell containing a segment of the Copermittee's MS4, which must consist of one of the following:

[a] A major outfall,
[b] Other outfall point, or
[c] Other point of access (e.g., manhole);

(iii) Each non-storm water MS4 monitoring station should be located downstream of any areas that are known or suspected to be sources of non-storm water discharges and/or illicit discharges or connections to the MS4;

(iv) Each non-storm water MS4 monitoring station must be located to the degree practicable at the farthest outfall, manhole, or other accessible location downstream in the MS4, within each cell;

(v) In addition to the non-storm water MS4 monitoring stations identified in accordance with Provisions D.1.a.(1)(a)(i)-(iv) above, each Copermittee must identify stations that will be screened and monitored during dry weather days to identify non-storm water discharges from sources not directly under the jurisdiction of the Copermittee.[7] These stations must be selected in accordance with the following guidelines and criteria:

[a] Stations should be located at or prior to the point of discharge into the Copermittee's MS4, but may be located downstream of the source as long as the station remains appropriate for characterizing the discharge from the source not within the authority of the Copermittee to control,
[b] Any non-storm water MS4 monitoring station identified in accordance with Provisions D.1.a.(1)(a)(i)-(iv) and located at the point of discharge or directly downstream of a known or suspected source of non-storm water discharges not within the authority of the Copermittee to control may also be utilized as a station to monitor the source not within the authority of the Copermittee to control;

(vi) The following factors should be considered in determining the location of each non-storm water MS4 monitoring station:

[a] Safety of personnel and accessibility of the location,
[b] Total area draining to the location,
[c] Population density of the area draining to the location,
[d] Traffic density,
[e] Age of the structures or buildings in the area,

[7] Sources not directly under the jurisdiction of and subject to regulation by the Copermittee may include lands or areas under the jurisdiction of other Copermittees, owners or operators of federal and state lands or facilities, tribal lands, special districts, etc.

[f] History of the area,
[g] Land use types draining to the location,
[h] Hydrological conditions, and
[i] Recommendations from the San Diego Water Board; and

(vii) No more than 500 non-storm water MS4 monitoring stations need to be selected by each Copermittee within its jurisdiction for any given year.

(b) Non-Storm Water MS4 Station Prioritization [D.1.a.(1)(b)]

Based on the first year of non-storm water field observations collected consistent with the Provision D.1.a.(1)(c)(i), each Copermittee must identify the high priority non-storm water MS4 monitoring stations. The non-storm water MS4 monitoring stations that meet the following criteria must be identified as high priority:

(i) The Copermittee has not identified and eliminated the source of the non-storm water discharges; or

(ii) The Copermittee has not been able to eliminate the source of an identified illicit discharge, and

(iii) The non-storm water discharges and/or illicit discharges are known or suspected to contribute and/or contain pollutants that cause or contribute, or threaten to cause or contribute to a condition of pollution or nuisance associated with the highest water quality priorities related to discharges from the MS4s.

(iv) The Copermittee may also designate any non-storm water MS4 monitoring stations that do not meet the criteria above as high priority.

(c) Non-Storm Water Monitoring Procedures [D.1.a.(1)(c)]

Each Copermittee must monitor the non-storm water MS4 monitoring stations within its jurisdiction as follows:

(i) *Non-Storm Water Field Observations* [D.1.a.(1)(c)(i)]

[a] Monitoring events for each non-storm water MS4 monitoring station must be scheduled as follows:
[1] During the first year of enrollment under this Order, the Copermittee must record field observations consistent with Table D-1 at each non-storm water MS4 monitoring station within its jurisdiction at least one time per month;

Table D-1. Field Observations for Non-Storm Water MS4 Monitoring Stations

Field Observations
• Station identification and location. • Presence of flow, or pooled or ponded water. • If flow is present: - Flow estimation (i.e. width of water surface, approximate depth of water, approximate flow velocity, flow rate), - Flow characteristics (i.e. presence of floatables, surface scum, or sheens, odor, color), - Flow source(s) suspected or identified from non-storm water source investigation, and - Flow source(s) eliminated during non-storm water source identification. • If pooled or ponded water is present: - Characteristics of pooled or ponded water (i.e. presence of floatables, surface scum, or sheens, odor, color), and - Known or suspected source(s) of pooled or ponded water. • Station description (i.e. deposits or stains, vegetation condition, structural condition, observable biology). • Presence and assessment of trash in and around station. • Evidence or signs of illicit connections or illegal dumping.

[2] For any stations monitoring sources not within the authority of the Copermittee to control where flows are observed during the first year of enrollment under this Order, the Copermittee must develop a field screening and monitoring schedule that can characterize the monthly non-storm water discharges and pollutant loads from the sources in or discharging to the Copermittee's MS4;

[3] High priority non-storm water MS4 monitoring stations must be monitored in accordance with the following:

A. Each Copermittee must designate at least 5 high priority non-storm water MS4 monitoring stations that are representative of non-storm water discharges from areas consisting primarily of residential, commercial, and industrial land uses present within and directly under the Copermittee's jurisdiction. Where there are less than 5 non-storm water MS4 monitoring stations within a Copermittee's jurisdiction, all stations must be designated as high priority, and

B. Each Copermittee must develop a monitoring schedule that can characterize the monthly non-storm water discharges and pollutant loads in or discharging from the high priority non-storm water MS4 monitoring stations;

[4] At least 10 percent of the non-storm water MS4 monitoring stations not identified as high priority must be screened and monitored each month. In addition, each non-storm water MS4 monitoring station must be screened and monitored at least once per year. If non-storm water flows are observed at

any non-storm water MS4 monitoring stations not identified as high priority, then they must become high priority pursuant to Provision D.1.a.(1)(b).

[b] For each monitoring events required above, the narrative descriptions and observations in Table D-1 must be recorded at each non-storm water MS4 monitoring station.

(ii) *Non-Storm Water Field Monitoring* [D.1.a.(1)(c)(ii)]

If flows, or pooled or ponded water are present during the field observations required under Provision D.1.a.(1)(c)(i), the Copermittee must monitor and record the parameters in Table D-2:

Table D-2. Field Monitoring Parameters for Non-Storm Water MS4 Monitoring Stations

Parameters
• pH
• Temperature
• Specific conductivity
• Dissolved oxygen
• Turbidity
• Total chlorine
• Total copper*
• Total phenol
• Detergents (or surfactants)*
• Total hardness*
• Reactive phosphorus*
• Nitrate*
• Ammonia as nitrogen*

* Field measurement not required if flow is observed and collection of a sample for analysis is required.

(iii) *Non-Storm Water Analytical Monitoring* [D.1.a.(1)(c)(iii)]

If flows are present during the field observations required under Provision D.1.a.(1)(c)(i), samples must be collected and analyzed as follows:

[a] If the Copermittee identifies and eliminates the source of non-storm water discharge, analysis of the sample is not required, but encouraged;

[b] During the first year of enrollment under this Order, samples must be collected if flows are observed at non-storm water MS4 monitoring stations. Samples must be analyzed for the following constituents~~, unless the Copermittee has historical data that can demonstrate or provide justification that the analysis of the constituent is not necessary~~:

[1] Any pollutants identified as the highest priority for the Watershed Management Area in the Water Quality Improvement Plan,

[2] Any pollutants or constituents that the Copermittee has identified as a potential concern to receiving waters requiring additional data collection,

[3] Constituents listed in Table D-3;

Table D-3. Analytical Monitoring Constituents for Non-Storm Water MS4 Monitoring Stations

Conventionals, Nutrients, Hydrocarbons	Pesticides	Metals (Total and Dissolved)	Indicator Bacteria
• Total Dissolved Solids • Total Suspended Solids • Total Phosphorus • Dissolved Phosphorus • Nitrite[1] • Nitrate[1] • Total Kjeldhal Nitrogen • Ammonia • Oil and Grease	• Diazinon • Chlorpyrifos • Pyrethroids	• Cadmium • Copper • Lead • Zinc	• Total Coliform • Fecal Coliform[2] • *Enterococcus*

Notes:
1. Nitrite and nitrate may be combined and reported as nitrite+nitrate.
2. *E. Coli* may be substituted for Fecal Coliform.

[c] **After** the first year of enrollment under this Order, samples must be collected from all high priority non-storm water MS4 monitoring stations for analysis at least two times per year. Samples must be collected at least once during the dry season (May-September) and at least once after the first storm event of the wet season (October-April). Samples must be analyzed for the following constituents:
[1] Any pollutants identified as the highest priority for the Watershed Management Area in the Water Quality Improvement Plan,
[2] Any pollutants or constituents that the Copermittee has identified as a potential concern to receiving waters requiring additional data collection, and
[3] Constituents listed in Table D-3 must be analyzed at least once per year;

[d] Samples must be collected from all non-storm water MS4 monitoring stations not identified as high priority for analysis if flows are observed during required field screening and monitoring events. Samples must be analyzed for the following constituents, unless the Copermittee has historical data that can demonstrate or provide justification that the analysis of the constituent is not necessary:
[1] Any pollutants identified as the highest priority for the Watershed Management Area in the Water Quality Improvement Plan,
[2] Any pollutants or constituents that the Copermittee has identified as a potential concern to receiving waters requiring additional data collection, and
[3] Constituents listed in Table D-3.

(2) Dry Weather Ambient Receiving Water Monitoring Program [D.1.a.(2)]

Each Copermittee must develop and conduct a program to monitor and characterize the ambient conditions of the receiving waters utilized for conveying non-storm water within and through its jurisdiction. Any available monitoring data not collected specifically to meet these requirements may be utilized by the Copermittee. The dry weather ambient receiving water monitoring program must meet the following minimum requirements:

(a) Dry Weather Ambient Receiving Water Monitoring Stations [D.1.a.(2)(a)]

Each Copermittee must identify the dry weather ambient receiving water monitoring stations that will be screened and monitored. Any location in a receiving water that is already monitored by the Copermittee or another entity may also be utilized as a dry weather ambient receiving water monitoring station. The monitoring stations must be selected in accordance with the following criteria:

(i) The following factors should be considered in determining the location of each dry weather ambient receiving water monitoring station:

[a] Permission to cross private property and public land,
[b] Safety of personnel and accessibility of the location,
[c] Location can complement or supplement historical ambient receiving water data,
[d] Location should not be in close proximity to any MS4 outfalls or other point source discharges to the receiving water,
[e] Natural or relatively unaltered areas in receiving waters are preferred, and
[f] Recommendations from the San Diego Water Board;

(ii) Locate at least one monitoring station in the lowest part of the Watershed Management Area near the boundary of its jurisdiction;

(iii) Locate at least one monitoring station located in the uppermost part of the Watershed Management Area near the boundary of its jurisdiction; and

(iv) The monitoring stations identified in Provisions D.1.a.(2)(a)(ii) and D.1.a.(2)(a)(iii) must be hydraulically connected.

(b) Dry Weather Ambient Receiving Water Monitoring Procedures [D.1.a.(2)(b)]

Each Copermittee must monitor the dry weather ambient receiving water monitoring stations as follows:

(i) *Dry Weather Ambient Receiving Water Field Observations* [D.1.a.(2)(b)(i)]

Monitoring events for each monitoring station must be scheduled as follows:

[a] During the first year of enrollment under this Order, the Copermittee must record field observations consistent with Table D-4 at each dry weather ambient receiving water monitoring station at least one time per month; and

Table D-4. Field Observations for Dry Weather Ambient Receiving Water Monitoring Stations

Field Observations
• Station identification and location. • Presence of flow, or pooled or ponded water. • If flow is present: - Flow estimation (i.e. width of water surface, approximate depth of water, approximate flow velocity, flow rate), - Flow characteristics (i.e. presence of floatables, surface scum, or sheens, odor, color), • If pooled or ponded water is present: - Characteristics of pooled or ponded water (i.e. presence of floatables, surface scum, or sheens, odor, color),. • Station description (i.e. deposits or stains, vegetation condition, structural condition, observable biology). • Presence and assessment of trash in and around station.

[b] For any monitoring stations where flows are observed during the first year of enrollment under this Order, the Copermittee must develop a field screening and monitoring schedule that can characterize the monthly flows and pollutant loads in the receiving water.

(ii) *Dry Weather Ambient Receiving Water Field Monitoring* [D.1.a.(2)(b)(ii)]

If flow, or pooled or ponded water is present during the field observations required under Provision D.1.a.(2)(b)(i), the Copermittee must monitor and record the parameters in Table D-2.

(iii) *Dry Weather Ambient Receiving Water Analytical Monitoring* [D.1.a.(2)(b)(iii)]

If flows are present during the field observations required under Provision D.1.a.(2)(b)(i), samples of the ambient receiving water flows must be collected and analyzed as follows:

[a] During the first year of enrollment under this Order, samples must be collected for each observation of flow in the ambient receiving water monitoring stations for analysis. Samples must be analyzed for the following constituents:

[1] Any pollutants identified as the highest priority for the Watershed Management Area in the Water Quality Improvement Plan,

[2] Any non-storm water pollutants or constituents that the Copermittee has identified as a potential concern to receiving waters requiring additional data collection, and
[3] Constituents listed in Table D-3; and

[b] **After** the first year of enrollment under this Order, samples of flows observed at ambient receiving water monitoring stations must be collected for analysis at least two times during the remaining term of this Order. Samples must be collected at least once during the dry season (May-September) and at least once after the first storm event of the wet season (October-April). Samples must be analyzed for the following constituents:
[1] Any pollutants identified as the highest priority for the Watershed Management Area in the Water Quality Improvement Plan,
[2] Any pollutants or constituents that the Copermittee has identified as a potential concern to receiving waters requiring additional data collection,
[3] Constituents listed in Table D-3 must be analyzed at least once per year.

b. WET WEATHER JURISDICTIONAL MONITORING [D.1.b]

For wet weather days,[8] each Copermittee must implement the following minimum monitoring requirements within its jurisdiction:

(1) Storm Water MS4 Outfall Monitoring Program [D.1.b.(1)]

Each Copermittee must develop and conduct a program to monitor and characterize the storm water flows and pollutant loads from the MS4 outfalls within its jurisdiction during wet weather days. Any available monitoring data not collected specifically to meet these requirements may be utilized by the Copermittee. The monitoring program must meet the following minimum requirements:

(a) Storm Water MS4 Outfall Monitoring Stations [D.1.b.(1)(a)]

Each Copermittee must identify the wet weather MS4 outfall monitoring stations within its jurisdiction that will be monitored and sampled during wet weather days. Any non-storm water MS4 monitoring station identified under Provision D.1.a.(1)(a) may also be utilized as a storm water MS4 outfall monitoring station. Monitoring stations must be selected in accordance with the following guidelines and criteria:

(i) The following factors should be considered in determining the location of each wet weather MS4 outfall monitoring station:

[8] Wet weather day defined as any day with 0.1 inches of rain or greater and the following 3 days.

[a] Safety of personnel and accessibility of the location,
[b] Total area draining to the location,
[c] Population density of the area draining to the location,
[d] Traffic density,
[e] Age of the structures or buildings in the area,
[f] History of the area,
[g] Land use types draining to the location,
[h] Hydrological conditions, and
[i] Recommendations from the San Diego Water Board.

(ii) Each wet weather MS4 outfall monitoring station must consist of one of the following:

[a] A major outfall, or
[b] Other outfall point, or
[c] Other point of access (e.g., manhole), only as an alternate location if safety during wet weather discharge sampling at available outfall locations discharging to receiving waters is a significant concern and limits accessibility;

(iii) Each Copermittee must designate at least 5 monitoring stations that are representative of storm water flows from areas consisting primarily of residential, commercial, and industrial land uses present within the Copermittee's jurisdiction. Where there are less than 5 MS4 outfalls within a Copermittee's jurisdiction, all MS4 outfalls must be designated as wet weather MS4 outfall monitoring stations.

(iv) Any monitoring station that does not have any SAL exceedances for 3 successive years may be replaced with a different monitoring station.

(b) Storm Water MS4 Outfall Monitoring Procedures [D.1.b.(1)(b)]

Each Copermittee must develop monitoring procedures to be consistent with the following criteria:

(i) A narrative description must be provided of the station identification and location, date and duration of the storm event(s) sampled, rainfall estimates of the storm event which generated the sampled discharge and the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event;

(ii) Flow rates and volumes for each monitoring station must be measured or estimated during each monitoring event in accordance with the USEPA Storm Water Sampling Guidance Document (EPA-833-B-92-001), sections 3.2.1 or 3.2.2, or other method proposed by the Copermittees that is acceptable to the San Diego Water Board;

(iii) Each Copermittee must develop and implement a monitoring frequency during the wet season to characterize pollutant discharges from the MS4 outfalls within its jurisdiction. At a minimum, storm water samples must be collected from two storm events occurring at least one month apart for each monitoring station. Samples must be collected as follows:

[a] Grab samples may be collected only for pH, temperature, specific conductivity, dissolved oxygen, hardness, oil and grease, and indicator bacteria,

[b] For all other constituents, one of the following methods must be used to collect the samples:

[1] A 24-hour composite sample, using a minimum of 4 grab samples, collected during the first 24 hours of the storm water discharge, or for the entire storm water discharge if the storm event is less than 24 hours. Results of the analyses of individual grab samples may be averaged to obtain the daily average,

[2] A flow-weighted composite sample for either the entire discharge or for the first 3 hours of the discharge. The flow-weighted composite sample for the storm water discharge may be taken with a continuous sampler or as a combination of a minimum of three sample aliquots taken in each hour of discharge for the entire discharge or for the first three hours of the discharge, with each aliquot being separated by a minimum period of fifteen minutes. Only one analysis of the composite of aliquots is required, or

[3] A minimum of one grab sample may be collected for storm water discharges from holding ponds or other impoundments with a retention period greater than 24 hours;

(iv) Storm water MS4 outfall monitoring stations must be monitored and sampled during the first wet weather event of the wet season. Samples must be analyzed for the following constituents:

[a] Any pollutants contributing to the highest water quality priorities for the Watershed Management Area as identified in the Water Quality Improvement Plan,

[b] Any non-storm water pollutants or constituents that the Copermittee has identified as a potential concern to receiving waters requiring additional data collection, and

[c] Constituents listed in Table D-5.

Table D-5. Analytical Monitoring Constituents for Wet Weather MS4 Outfall Monitoring Stations

Conventionals, Nutrients, Hydrocarbons	Pesticides	Metals (Total and Dissolved)	Indicator Bacteria
• Total Dissolved Solids • Total Suspended Solids • Turbidity[1] • Total Hardness • pH • Specific Conductivity • Temperature • Dissolved Oxygen • Biological Oxygen Demand, 5-day • Chemical Oxygen Demand • Total Organic Carbon • Dissolved Organic Carbon • Sulfate • Methylene Blue Active Substances (MBAS) • Total Phosphorus[1] • Dissolved Phosphorus • Nitrite[1,2] • Nitrate[1,2] • Total Kjeldhal Nitrogen • Ammonia • Oil and Grease	• Diazinon • Chlorpyrifos • Pyrethroids	• Arsenic • Cadmium[1] • Chromium • Copper[1] • Iron • Lead[1] • Manganese • Mercury • Nickel • Selenium • Silver • Thallium • Zinc[1]	• Total Coliform • Fecal Coliform[3] • *Enterococcus*

Notes:
1. Constituent with a storm water action level (SAL) specified under Provision C.2.
2. Nitrite and nitrate may be combined and reported as nitrite+nitrate.
3. *E. Coli* may be substituted for Fecal Coliform.

(v) Samples collected after the first wet weather monitoring event and during the remaining period of the wet season must be analyzed for the following constituents:

[a] Any pollutants contributing to the highest water quality priorities for the Watershed Management Area as identified in the Water Quality Improvement Plan.

[b] Any pollutants or constituents that the Copermittee has identified as a potential concern to receiving waters requiring additional data collection.

(2) Storm Water Pollutant Source Identification Monitoring Program [D.1.b.(2)]

Each Copermittee must develop and conduct a program within its jurisdiction to identify the sources of pollutants in storm water discharged from the Copermittee's MS4 during wet weather conditions. Any available monitoring data not collected specifically to meet these requirements may be utilized by the Copermittee. The storm water pollutant source identification monitoring

program must include focused monitoring which moves upstream into each MS4 outfall drainage area as necessary to identify sources of the highest water quality priorities in the receiving waters. The wet weather source identification monitoring program must begin no later than the wet season following the date the San Diego Water Board determines that the Water Quality Improvement Plan meets the requirements of this Order.

2. Watershed Monitoring Requirements

a. WATERSHED MONITORING STATIONS [D.2.a]

The Copermittees must identify watershed monitoring stations within the Watershed Management Area. The watershed monitoring stations must be selected in accordance with the following criteria:

(1) All mass loading stations (MLSs) previously established by the Copermittees in each Watershed Management Area must continue to be utilized as watershed monitoring stations;

(2) All temporary watershed assessment stations (TWASs), bioassessment stations, and stream assessment stations previously established by the Copermittees must be considered for continued use as watershed monitoring stations;

(3) Any dry weather ambient receiving water monitoring station identified pursuant to Provision D.1.a.(2)(a) may be considered for use as a watershed monitoring station;

(4) At least one reference watershed monitoring station must be selected for each Watershed Management Area; and

(5) At least one watershed monitoring station located between and hydrologically connected to each MLS and each reference station must be selected for each Watershed Management Area.

b. DRY WEATHER WATERSHED MONITORING [D.2.b]

The Copermittees must develop and conduct a program to monitor the condition of the receiving waters in each Watershed Management Area during dry weather conditions. Any available monitoring data not collected specifically to meet these requirements may be utilized by the Copermittees. For dry weather days, the Copermittees must develop and/or update its written dry weather watershed monitoring procedures to be consistent with the following criteria:

(1) Dry Weather Watershed Field Observations [D.2.b.(1)]

For each dry weather watershed monitoring event, the Copermittee must record field observations consistent with Table D-4 at each monitoring station. Dry weather watershed monitoring is required at least every two years for each monitoring station. At least two dry weather watershed monitoring events must be scheduled for each watershed monitoring station per monitoring year. One monitoring event is required during the dry season (May-September) and one monitoring event is required on a dry weather day during the wet season (October-April), after the first storm event.

(2) Dry Weather Watershed Field Monitoring [D.2.b.(2)]

If flow, or pooled or ponded water is present during the dry weather watershed monitoring event required pursuant to Provision D.2.b.(1), and conditions allow the collection of the data, the Copermittee must monitor and record the parameters in Table D-2.

(3) Dry Weather Watershed Analytical Monitoring [D.2.b.(3)]

Samples from each monitoring station must be collected for analysis at least every two years. At least two dry weather watershed analytical monitoring events must be scheduled for each watershed monitoring station per monitoring year. Samples must be collected once during the dry season (May-September) and once on a dry weather day during the wet season (October-April), after the first storm event. Analytical monitoring samples must be collected and analyzed as follows:

(a) Grab samples may be collected only for pH, temperature, specific conductivity, dissolved oxygen, hardness, oil and grease, and indicator bacteria;

(b) For all other constituents, time-weighted composites composed of 24 discrete hourly samples must be collected; and

(c) Analysis for the following constituents is required:

(i) Any other pollutants contributing to the highest water quality priorities for the Watershed Management Area as identified in the Water Quality Improvement Plan,

(ii) Any pollutants that the Copermittee has identified as a potential concern to receiving waters requiring additional data collection, and

(iii) Constituents listed in Table D-5.

(4) Dry Weather Watershed Toxicity Monitoring [D.2.b.(4)]

Samples from each monitoring station must be collected for toxicity testing at least every two years. At least two dry weather watershed toxicity monitoring events must be scheduled for each watershed monitoring station per monitoring year. Samples must be collected once during the dry season (May-September) and once on a dry weather day during the wet season (October-April), after the first storm event. Toxicity testing must be conducted in accordance with the following table:

Table D-6. Toxicity Testing for Dry Weather Watershed Monitoring Station Flows

Dry Weather Watershed Monitoring Station	Freshwater Organisms	Estuarine and Marine Organisms
Mass Loading Stations[1]	3 acute[2] 3 chronic[2]	1 chronic[3]
Others Stations	3 acute[2] 3 chronic[2]	None

Notes:
1. Dry weather toxicity testing at a mass loading station may be omitted if the channel flows are diverted year-round during dry weather conditions to the sanitary sewer for treatment.
2. The presence of acute toxicity must be determined in accordance with USEPA protocol EPA-821-R-02-012. The presence of chronic toxicity must be determined in accordance with USEPA protocol EPA-821-R-02-013. Toxicity testing must include the use of *Pimephales promelas* (fathead minnow), *Hyalella azteca*, and *Psuedokirchneriella subcapitata* (formerly *Selenastrum capricornutum*, unicellular algae).
3. The presence of chronic marine toxicity must be determined in accordance with USEPA guidance EPA 600/R95/136, except for chronic mysid tests which must be conducted in accordance with USEPA protocol EPA-821-R-02-014. *Americamysis bahia* may be used as a marine test organism if *Holmesimysis costata* cannot be reasonably obtained. The use of, and justification for, *A. bahia* must be clearly reported in the Annual Report.

(5) Dry Weather Watershed Bioassessment Monitoring [D.2.b.(5)]

Bioassessment monitoring for each monitoring station is required at least every two years. Bioassessment monitoring is required to be conducted in May or June for each watershed monitoring station, and must be conducted as follows:

(a) The following bioassessment samples and measurements must be collected:

(i) Macroinvertebrate samples must be collected in accordance with the "Reachwide Benthos (Multihabitat) Procedure" in the most current Surface Water Ambient Monitoring Program (SWAMP) Bioassessment Standard Operating Procedures (SOP), and amendments, as applicable;[9]

[9] Ode, P.R.. 2007. Standard operating procedures for collecting macroinvertebrate samples and associated physical and chemical data for ambient bioassessments in California. California State Water Resources Control Board Surface Water Ambient Monitoring Program (SWAMP) Bioassessment SOP 001. http://www.swrcb.ca.gov/water_issues/programs/swamp/tools.shtml#monitoring

(ii) The "Full" suite of physical habitat characterization measurements must be collected in accordance with the most current SWAMP Bioassessment SOP, and as summarized in the SWAMP Stream Habitat Characterization Form – Full Version;[10] and

(iii) Freshwater algae samples must be collected in accordance with the SWAMP Standard Operating Procedures for Collecting Algae Samples.[11] Analysis of samples must include algal taxonomic composition (diatoms and soft algae) and algal biomass.

(b) The bioassessment samples, measurements, and appropriate water chemistry data must be used to calculate the following:

(i) An Index of Biotic Integrity (IBI) for macroinvertebrates for each monitoring station where bioassessment monitoring was conducted, based on the most current calculation method;[12] and

(ii) An IBI for algae for each monitoring station where bioassessment monitoring was conducted, when a calculation method is developed.[13]

(6) Dry Weather Watershed Hydromodification Monitoring [D.2.b.(6)]

In addition to the hydromodification monitoring conducted as part of the Copermittees' Hydromodification Management Plans, for any year dry weather watershed monitoring is required, hydromodification monitoring is required to be conducted at least once during the dry weather season (May-September) for each monitoring station. The following hydromodification monitoring observations and measurements must be collected within an appropriate domain of analysis for the monitoring station:

(a) Channel conditions, including:

(i) Channel dimensions,

(ii) Hydrologic and geomorphic conditions, and

(iii) Presence and condition of vegetation and habitat;

[10] Available at: http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/reports/fieldforms_fullversion052908.pdf
[11] Fetscher et al. 2009. Standard Operating Procedures for Collecting Stream Algae Samples and Associated Physical Habitat and Chemical Data for Ambient Bioassessments in California.
[12] The most current calculation method at the time the Order was adopted is outlined in "A Quantitative Tool for Assessing the Integrity of Southern California Coastal Streams" (Ode, et al. 2005. Environmental Management. Vol. 35, No. 1, pp. 1-13). If an updated or new calculation method is developed, either both (i.e. current and updated/new) methods must be used, or historical IBIs must be recalculated with the updated or new calculation method.
[13] When a calculation method is developed, IBIs must be calculated for all available and appropriate historical data.

(b) Location of discharge points;

(c) Habitat integrity;

(d) Photo documentation of existing erosion and habitat impacts, with location (i.e. latitude and longitude coordinates) where photos were taken;

(e) Measurement or estimate of dimensions of any existing channel bed or bank eroded areas, including length, width, and depth of any incisions; and

(f) Known or suspected cause(s) of existing downstream erosion or habitat impact, including flow, soil, slope, and vegetation conditions, as well as upstream land uses and contributing new and existing development.

(7) Dry Weather Watershed Sediment Quality Monitoring [D.2.b.(7)]

Sediment monitoring must be performed by the Copermittees to assess compliance with sediment quality receiving water limits applicable to MS4 discharges to enclosed bays and estuaries. The monitoring may be performed either by individual or multiple Copermittees to assess compliance with receiving water limits, or through participation in a water body monitoring coalition. The Copermittees must identify sediment sampling stations that are spatially representative of the sediment within the water body segment or region of interest. Sediment quality monitoring must be conducted at least once every two years between June and September. Sediment quality monitoring must be conducted in conformance with the monitoring requirements set forth in the State Water Board Sediment Quality Control Plan.

c. WET WEATHER WATERSHED MONITORING [D.2.c]

The Copermittees in each Watershed Management Area must develop and conduct a program to monitor the condition in receiving waters and characterize storm water flows during wet weather days of the wet season. Any available monitoring data not collected specifically for this Order that meet the monitoring requirements may be utilized by the Copermittee. For wet weather days, the Copermittees must develop and/or update its written wet weather watershed monitoring procedures to be consistent with the following criteria:

(1) Wet Weather Watershed Field Observations [D.2.c.(1)]

Wet weather watershed monitoring events are required at least once every two years for each dry weather watershed monitoring station. Each monitoring station must be monitored during at least two wet weather events

in any period (July 1 to June 30) that monitoring is required, including the first wet weather event of the wet season beginning October 1 and ending April 30, and at least one wet weather event after February 1. For each wet weather watershed monitoring event, the following narrative descriptions and observations must be recorded at each monitoring station:

(a) A narrative description of the station that includes the location, date and duration of the storm event(s) sampled, rainfall estimates of the storm event, and the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event;

(b) The flow rates and volumes measured or estimated. Data from nearby USGS gauging stations may be utilized, or flow rates may be measured or estimated in accordance with the USEPA Storm Water Sampling Guidance Document (EPA-833-B-92-001), section 3.2.1, or other method proposed by the Copermittees that is acceptable to the San Diego Water Board;

(c) Station condition (i.e. deposits or stains, vegetation condition, structural condition, observable biology); and

(d) Presence and assessment of trash in and around station.

(2) Wet Weather Watershed Field Monitoring [D.2.c.(2)]

For each wet weather watershed monitoring event, the parameters in Table D-2 must be monitored and recorded.

(3) Wet Weather Watershed Analytical Monitoring [D.2.c.(3)]

Samples from each wet weather watershed monitoring station must be collected for analysis at least two times during the term of this Order, at least once for the first wet weather event of the wet season, and at least once for a wet weather event after February 1. Wet weather samples must be collected and analyzed as follows:

(a) Grab samples may be collected only for pH, temperature, specific conductivity, dissolved oxygen, hardness, oil and grease, and indicator bacteria;

(b) For all other constituents, one of the following methods must be used to collect the samples:

(i) A 24-hour composite sample, using a minimum of 4 grab samples, collected during the first 24 hours of the storm water discharge, or for the entire storm water discharge if the storm event is less than 24 hours. Results of the analyses of individual grab samples may be averaged to obtain the daily average, or

(ii) A flow-weighted composite sample for either the entire discharge or for the first 3 hours of the discharge. The flow-weighted composite sample for the storm water discharge may be taken with a continuous sampler or as a combination of a minimum of three sample aliquots taken in each hour of discharge for the entire discharge or for the first three hours of the discharge, with each aliquot being separated by a minimum period of fifteen minutes. Only one analysis of the composite of aliquots is required; and

(c) Analysis for the following constituents is required:

(i) Any other pollutants contributing to the highest water quality priorities for the Watershed Management Area as identified in the Water Quality Improvement Plan,

(ii) Any water pollutants or constituents that the Copermittee has identified as a potential concern to receiving waters requiring additional data collection, and

(iii) Constituents listed in Table D-5.

(4) Wet Weather Watershed Toxicity Monitoring [D.2.c.(4)]

Samples from each wet weather watershed monitoring station must be collected for toxicity testing at least two times during the term of this Order, at least once for the first wet weather event of the wet season, and at least once for a wet weather event after February 1. Toxicity testing must be conducted in accordance with the following table:

Table D-7. Toxicity Testing for Wet Weather Watershed Monitoring Station Flows

Wet Weather Watershed Monitoring Station	Freshwater Organisms	Estuarine and Marine Organisms
Mass Loading Stations	3 acute[1]	1 acute[2] 2 chronic[2]
Others Stations	None	None

Notes:
1. The presence of acute toxicity must be determined in accordance with USEPA protocol EPA-821-R-02-012. Toxicity testing must include the use of *Pimephales promelas* (fathead minnow), *Hyalella azteca*, and *Psuedokirchneriella subcapitata* (formerly *Selenastrum capricornutum*, unicellular algae).
2. The presence of acute toxicity must be determined in accordance with USEPA protocol EPA-821-R-02-012. The presence of chronic marine toxicity must be determined in accordance with USEPA guidance EPA 600/R95/136, except for chronic mysid tests which must be conducted in accordance with USEPA protocol EPA-821-R-02-014. *Americamysis bahia* may be used as a marine test organism if *Holmesimysis costata* cannot be reasonably obtained. The use of, and justification for, *A. bahia* must be clearly reported in the Annual Report.

d. ALTERNATIVE WATERSHED MONITORING REQUIREMENTS [D.2.d]

In lieu of implementing the watershed monitoring requirements under Provisions D.2.a-c, the San Diego Water Board may direct the Copermittees to participate with other regulated entities, other interested parties, and the San Diego Water Board in the development, refinement, implementation, and coordination of regional monitoring and assessment programs to determine the status and trends of water quality conditions in 1) coastal waters, 2) enclosed bays, harbors, estuaries, and lagoons, and 3) streams.

e. WATERSHED MANAGEMENT AREA SPECIAL STUDIES [D.2.e]

(1) Within the term of this Order, the Copermittees must implement at least three special studies in each Watershed Management Area. The Copermittees are to determine which special studies will be developed and implemented in the Watershed Management Area. The monitoring plans for the Watershed Management Area special studies must be submitted with the Water Quality Improvement Plan required pursuant to Provision F.1. The Watershed Management Area special studies must, at a minimum, be in conformance with the following criteria:

(a) The special studies must be related to the highest water quality priorities identified by the Copermittees within the Watershed Management Area;

(b) The special studies must be implemented within the Watershed Management Area;

(c) The special studies must require some form of participation by all Copermittees within the Watershed Management Area; ~~and~~

(d) One of the three required special studies may be implemented as part of a regional special study required pursuant to Provision D.3; and

~~(d)~~(e) The special studies shall include partnerships and cooperation with interested stakeholder groups whenever feasible.

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(2) The Copermittees must report the progress and findings of the Watershed Management Area Special Studies as part of the Annual Report for each Watershed Management Area, as required pursuant to Provision F.3.b.

3. Regional Special Studies

Within the term of this Order, the Copermittees must develop and implement at least two regional special studies for the San Diego Region. The Copermittees must determine which regional special studies will be developed and implemented. The regional special studies must be identified in the Water Quality Improvement Plans required pursuant to Provision F.1. The regional special studies must, at a

minimum, be in conformance with the following criteria:

a. The special studies must be related to a water quality priority issue or potential water quality concern identified by the Copermittees for the entire San Diego Region;

b. The special studies must be implemented within the San Diego Region; ~~and~~

c. The special studies must require some form of participation by all Copermittees enrolled under this Order;

d. The special studies shall include partnerships and cooperation with interested stakeholder groups whenever feasible;

~~c.~~**e.** The County of San Diego shall be the lead Copermittee for the regional special studies.~~.~~

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4. Assessment Requirements

Each Copermittee must evaluate the data collected pursuant to Provisions D.1, D.2 and D.3 to identify causes of exceedances of action levels developed pursuant to Provision C, assess the quality of the discharges into and from the MS4s, and assess the quality of receiving waters. Each Copermittee must also assess the progress of the water quality improvement strategies required pursuant to Provision B.3 in restoring and protecting beneficial uses of receiving waters. Assessments must be performed as described in the following provisions:

a. MS4 DISCHARGES ASSESSMENTS [D.4.a]

(1) Jurisdictional Non-Storm Water Discharges Reduction Assessment [D.4.a.(1)]

(a) Non-Storm Water Action Levels [D.4.a.(1)(a)]

Each Copermittee must analyze the jurisdictional non-storm water monitoring data collected pursuant to Provision D.1.a and identify causes of NAL exceedances. The analysis must include, but not be limited to, all of the following considerations:

(i) For non-storm water discharges from the Copermittee's MS4 outfalls to receiving waters within the Copermittee's jurisdiction causing exceedances of NALs, the Copermittee must analyze its municipal, commercial, industrial, and residential inventories and activities, and other land use data, and identify sources or potential sources that may have caused or contributed to the NAL exceedances;

(ii) Each Copermittee must provide non-storm water monitoring and analytical data to demonstrate that NAL exceedances were caused by pollutants which are not anthropogenic in origin; and

(iii) Each Copermittee must provide non-storm water monitoring and analytical data to demonstrate that NAL exceedances were caused by pollutants which originate from sources or potential sources not within the authority of the Copermittee to control (e.g. Phase II dischargers or Caltrans).

(b) Calculate Jurisdictional Non-Storm Water Discharges and Pollutant Loads [D.4.a.(1)(b)]

Each Copermittee must analyze the jurisdictional non-storm water monitoring data collected pursuant to Provision D.1.a to calculate non-storm water discharges and pollutant loads from the MS4s and receiving waters in each jurisdiction. These calculations must be updated annually in the Annual Report required per Provision F.3.b. Each Copermittee must calculate:

(i) Monthly non-storm water discharges and pollutant loads from each known or potential source not within the authority of the Copermittee to control to an MS4 or receiving waters within the Copermittee's jurisdiction;

(ii) Monthly non-storm water discharges and pollutant loads from the Copermittee's MS4 outfalls to receiving waters within the Copermittee's jurisdiction, with an estimate of the percent contribution from each land use type within the drainage basin for each MS4 outfall;

(iii) Monthly non-storm water flows and pollutant loads in receiving waters at the downstream boundary of the Copermittee's jurisdiction; and

(iv) Monthly non-storm water flows and pollutant loads in receiving waters from areas or facilities subject to the Copermittee's legal authority that are discharged from the Copermittee's MS4 to downstream receiving waters.

(c) Review Progress and Evaluate Jurisdictional Actions [D.4.a.(1)(c)]

Each Copermittee must review the NAL exceedances, discharge and flow analyses, and pollutant load analyses required pursuant to Provisions D.4.a.(1)(a) and D.4.a.(1)(b) on an annual basis to:

(i) Identify reductions and progress in achieving reductions in non-storm water and illicit discharges and connections from different land uses and/or drainage areas to its MS4;

(ii) Assess the effectiveness of current actions being implemented by the Copermittee toward the reduction or elimination of non-storm water discharges from the MS4 within its jurisdiction; and

(iii) Identify modifications necessary to increase the effectiveness of the jurisdictional runoff management program toward reducing or eliminating non-storm water discharges to and from the MS4 within its jurisdiction.

(2) Watershed Management Area Non-Storm Water Assessment [D.4.a.(2)]

(a) Calculate Watershed Non-Storm Water Flows and Pollutant Loads [D.4.a.(2)(a)]

The Copermittees must analyze the jurisdictional non-storm water and watershed monitoring data collected per Provisions D.1.a and D.2.b to calculate non-storm water flows and pollutant loads in receiving waters for each Watershed Management Area. These calculations must be updated annually in the Annual Report required per Provision F.3.b. The Copermittees must develop or utilize appropriate methods or models to calculate:

(i) Monthly non-storm water runoff flows and pollutant loads at each watershed monitoring station from different land uses and drainage basins;

(ii) Monthly non-storm water flows and pollutant loads at each watershed monitoring station from all the Copermittees' MS4 outfalls to receiving waters, with an estimate of the percent contribution from different land uses; and

(iii) Monthly non-storm water flows and pollutant loads at each watershed monitoring station, with an estimate of the percent contribution from both areas or facilities subject to the Copermittees' legal authority and areas or facilities not subject to the Copermittees' legal authority.

(b) Evaluate Water Quality Improvement Strategies [D.4.a.(2)(b)]

The Copermittees in each Watershed Management Area must review the non-storm water flow and pollutant load analyses required pursuant to Provision D.4.a.(2)(a) on an annual basis to:

(i) Assess the effectiveness of the water quality improvement strategies being implemented within the Watershed Management Area toward reducing or eliminating non-storm water discharges and pollutant loads from entering and discharging from the MS4 to receiving waters; and

(ii) Identify modifications necessary to increase the effectiveness of the water quality improvement strategies toward reducing or eliminating non-storm water discharges and pollutant loads from entering and discharging from the MS4 to receiving waters.

PROVISION D: MONITORING AND ASSESSMENT REQUIREMENTS
D.4. Assessment Requirements

(3) Jurisdictional Storm Water Pollutant Discharges Reduction Assessment [D.4.a.(3)]

(a) Storm Water Action Levels [D.4.a.(3)(a)]

(i) For storm water discharges from the Copermittee's storm water MS4 outfall monitoring stations with analytical monitoring data indicating exceedances of SALs, the Copermittee must analyze its municipal, commercial, industrial, and residential inventories and activities, and other land use data and identify sources or potential sources that may have caused or contributed to the SAL exceedances;

(ii) Each Copermittee must provide storm water monitoring and analytical data to demonstrate that SAL exceedances were caused by the constituents in storm water discharges from the MS4 which are not anthropogenic in origin; and

(iii) Each Copermittee must provide storm water monitoring and analytical data to demonstrate that SAL exceedances were caused by the constituents in storm water discharges from the MS4 which originate from sources or potential sources not within the authority of the Copermittee to control.

(b) Calculate Jurisdictional Storm Water Discharges and Pollutant Loads [D.4.a.(3)(b)]

Each Copermittee must analyze the jurisdictional storm water monitoring data collected pursuant to Provision D.1.b to calculate storm water discharges and pollutant loads from the MS4s in each jurisdiction. These calculations must be updated annually in the Annual Report required per Provision F.3.b. Each Copermittee must calculate or estimate:

(i) The monthly mean rainfall estimates (or summary of weather bureau data) and the monthly average number of storm events;

(ii) The average storm water runoff coefficient for each land use type within the Copermittee's jurisdiction;

(iii) The volume of storm water discharged from each of the Copermittee's MS4 outfalls to receiving waters within its jurisdiction for each storm event;

(iv) The pollutant loads from each of the Copermittee's MS4 outfalls to receiving waters within its jurisdiction for each storm event; and

(v) The percent contribution of pollutant loads from each land use type within the drainage basin to storm water discharges for each MS4 outfall within its jurisdiction, for each storm event.

(c) Review Progress and Evaluate Jurisdictional Actions [D.4.a.(3)(c)]

Each Copermittee must review the SAL exceedances, discharge analyses, and pollutant load analyses required pursuant to Provisions D.4.a.(3)(a) and D.4.a.(3)(b) on an annual basis to:

(i) Identify reductions and progress in achieving reductions in pollutant concentrations and/or pollutant loads from different land uses and/or drainage areas discharging from its MS4;

(ii) Assess the effectiveness of current actions being implemented by the Copermittee toward the reduction of pollutants in storm water discharges from the MS4 within its jurisdiction to the MEP; and

(iii) Identify modifications necessary to increase the effectiveness of the jurisdictional runoff management program toward reducing pollutants in storm water discharges from the MS4 within its jurisdiction to the MEP.

(4) Watershed Management Area Storm Water Assessment [D.4.a.(4)]

(a) Calculate Watershed Storm Water Flows and Pollutant Loads [D.4.a.(4)(a)]

The Copermittees must analyze the jurisdictional storm water and watershed monitoring data collected per Provisions D.1.b and D.2.c to calculate storm water flows and pollutant loads in receiving waters for each Watershed Management Area. These calculations must be updated annually in the Annual Report required per Provision F.3.b. The Copermittees must develop or utilize appropriate methods or models to calculate:

(i) Storm water runoff flows and pollutant loads at each watershed monitoring station from different land uses and drainage basins;

(ii) Storm water flows and pollutant loads at each watershed monitoring station from all the Copermittees' MS4 outfalls, with an estimate of the percent contribution from different land uses; and

(iii) Storm water pollutant loads in receiving waters at each watershed monitoring station, with an estimate of the percent contribution from both areas or facilities subject to the Copermittees' legal authority and areas or facilities not within the authority of the Copermittees to control.

(b) Evaluate Water Quality Improvement Strategies [D.4.a.(4)(b)]

The Copermittees in each Watershed Management Area must review the storm water flow and pollutant load analyses required pursuant to Provision D.4.a.(4)(a) on an annual basis to:

(i) Assess the effectiveness of the water quality improvement strategies being implemented in each Watershed Management Area toward reducing pollutants in storm water discharges from the MS4s to the MEP; and

(ii) Identify modifications necessary to increase the effectiveness of the water quality improvement strategies toward reducing pollutants in storm water discharges from the MS4s to the MEP.

b. RECEIVING WATERS ASSESSMENTS [D.4.b]

The Copermittees must annually perform assessments of receiving waters based on data collected pursuant to Provision D.2 and any appropriate receiving water monitoring data available from other sources. The receiving waters assessments must analyze the status and trends of water quality conditions in 1) coastal waters, 2) enclosed bays, harbors, estuaries, and lagoons, and 3) streams under dry weather and wet weather conditions. For each of the three types of receiving waters, the Copermittees in each Watershed Management Area must:

(1) Identify the most critical beneficial uses that must be protected or restored to ensure overall health of the receiving water;

(2) Determine whether or not those critical beneficial uses are being protected or must be restored; and

(3) Identify short-term and/or long-term improvements or degradation of those critical beneficial uses.

c. WATER QUALITY IMPROVEMENT ASSESSMENTS [D.4.c]

The Copermittees in each Watershed Management Area must review the numeric targets in the Water Quality Improvement Plan, the data collected pursuant to Provisions D.1 and D.2, and the findings from the assessments required pursuant to Provisions D.4.a and D.4.b to assess the following:

(1) Beneficial uses of the receiving waters that are protected or must be restored;

(2) Appropriateness of final dry weather and wet weather numeric targets for the highest water quality priorities that will restore the impacted beneficial uses in the receiving waters;

(3) Non-storm water and storm water pollutant load reductions, or other improvements to receiving water or water quality conditions, that are necessary to attain the final numeric targets for restoring impacted beneficial uses in the receiving waters;

(4) Non-storm water and storm water pollutant load reductions necessary for the Copermittees to demonstrate that non-storm water and storm water discharges from their MS4s are not causing or contributing to exceedances of water quality objectives or impacts to beneficial uses in receiving waters;

(5) Non-storm water and storm water pollutant loads from their MS4s and/or receiving water flows that may be attributed to sources or potential sources not within the authority of the Copermittee to control and other non-anthropogenic sources identified by the Copermittees;

(6) Progress of the water quality improvement strategies toward attaining non-storm water and storm water pollutant load reductions or improvements to water quality conditions; and

(7) Progress toward achieving the interim and final numeric targets for restoring impacted beneficial uses in the receiving waters.

5. Monitoring Provisions

Each Copermittee must comply with all the monitoring, reporting, and recordkeeping provisions of the Standard Permit Provisions and General Provisions contained in Attachment B to this Order.

E. JURISDICTIONAL RUNOFF MANAGEMENT PROGRAMS

The purpose of this provision is for each Copermittee to implement a program to control the contribution of pollutants to and the discharges from the MS4 with its jurisdiction. The goal of this provision is to reduce the discharge of pollutants in storm water to the MEP and effectively prohibit non-storm water discharges to provide the reasonable protection, preservation, enhancement, and restoration of water quality and designated beneficial uses of waters of the state**.** This goal will be accomplished through compliance with the jurisdictional runoff management program requirements.

Each Copermittee must implement all the requirements of Provision E no later than 12 months after the adoption of this Order, or in accordance with Provision F.5.a. Each Copermittee must update its jurisdictional runoff management program document, in accordance with Provision F.2.a, to include all the requirements of Provision E. The jurisdictional runoff management programs implemented by each Copermittee must be consistent with the Water Quality Improvement Plan for the applicable Watershed Management Area required by Provision B. Until the Copermittee has updated its jurisdictional runoff management program document with the requirements of Provision E, the Copermittee must continue implementing its current jurisdictional runoff management program.

1. Legal Authority Establishment and Enforcement

a. Each Copermittee must establish, maintain, and enforce adequate legal authority within its jurisdiction to control pollutant discharges into and from its MS4 through statute, ordinance, permit, contract, order, or similar means. This legal authority must, at a minimum, authorize the Copermittee to:

(1) Prohibit and eliminate all illicit discharges and illicit connections to its MS4;

(2) Control the contribution of pollutants in discharges of runoff associated with industrial and construction activity to its MS4 and control the quality of runoff from industrial and construction sites, including industrial and construction sites which have coverage under the statewide General Permit for Discharges of Storm Water Associated with Industrial Activities (Industrial General Permit) or General Permit for Discharges of Storm Water Associated with Construction Activities (Construction General Permit), as well as to those sites which do not;

(3) Control the contribution of pollutants in discharges of runoff associated with commercial and residential activity to its MS4 and control the quality of runoff from commercial and residential sites.

~~(3)~~(4) Control the discharge of spills, dumping, or disposal of materials other than storm water into its MS4;

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~~(4)~~(5) Control through interagency agreements among Copermittees the contribution of pollutants from one portion MS4 to another portion of the MS4;

~~(5)~~(6) Control through interagency agreements with other owners of the MS4 such as Caltrans, the U.S. federal government, or sovereign Native American Tribes, where possible, the contribution of pollutants from one portion of the MS4 to another portion of the MS4;

~~(6)~~(7) Require compliance with conditions in its statutes, ordinances, permits, contracts, orders, or similar means to hold dischargers to its MS4 accountable for their contributions of pollutants and flows;

~~(7)~~(8) Require the use of BMPs to prevent or reduce the discharge of pollutants in storm water from its MS4 to the MEP;

~~(8)~~(9) Require documentation on the effectiveness of BMPs implemented to prevent or reduce the discharge of pollutants in storm water from its MS4 to the MEP;

~~(9)~~(10) Utilize enforcement mechanisms to require compliance with its statutes, ordinances, permits, contracts, orders, or similar means; and

~~(10)~~(11) Carry out all inspections, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with its statutes, ordinances, permits, contracts, orders, or similar means and with the requirements of this Order, including the prohibition of illicit discharges and connections to its MS4; the Copermittee must also have authority to enter, monitor, inspect, take measurements, review and copy records, and require regular reports from industrial facilities, including construction sites, discharging into its MS4.

b. With the first Annual Report required by Provision F.3.b, each Copermittee must submit a statement certified by its Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative that the Copermittee has taken the necessary steps to obtain and maintain full legal authority within its jurisdiction to implement and enforce each of the requirements contained in this Order.

2. Illicit Discharge Detection and Elimination

Each Copermittee must implement a program to actively detect and eliminate illicit discharges and improper disposal into the MS4, or otherwise require the discharger to apply for and obtain a separate NPDES permit. The illicit discharge detection and elimination program must include, at a minimum, the following requirements:

a. NON-STORM WATER DISCHARGES

Each Copermittee must address all non-storm water discharges as illicit discharges, unless a non-storm water discharge is either identified as a discharge authorized by a separate NPDES permit, or identified as a category of non-storm water discharges or flows that must be addressed pursuant to the following requirements:

(1) Discharges of non-storm water to the MS4 from the following categories must be addressed as illicit discharges unless the discharge has coverage under NPDES Permit No. CAG919001 (Order No. R9-2007-0034, or subsequent order) for discharges to San Diego Bay, or NPDES Permit No. CAG919002 (Order No. R9-2008-0002, or subsequent order) for discharges to surface waters ~~other than San Diego Bay~~:

(a) Uncontaminated pumped ground water;

(b) Discharges from foundation drains;

(c) Water from crawl space pumps; and

(d) Water from footing drains.

(2) Discharges of non-storm water from water line flushing and water main breaks to the MS4 must be addressed as illicit discharges unless the discharge has coverage under NPDES Permit No. CAG 679001 (Order No. R9-2010-0003, or subsequent order). This includes water line flushing and water main break discharges from water purveyors issued a water supply permit by the California Department of Public Health or federal military installations. Discharges from recycled or reclaimed water lines to the MS4 must be addressed as illicit discharges, unless the discharges have coverage under a separate NPDES permit.

(3) Discharges of non-storm water to the MS4 from the following categories must be addressed by the Copermittee as illicit discharges only if the Copermittee or the San Diego Water Board identifies the discharge as a source of pollutants to receiving waters:

(a) Diverted stream flows;

(b) Rising ground waters;

(c) Uncontaminated ground water infiltration to MS4s;

(d) Springs;

(e) Flows from riparian habitats and wetlands; and

(f) Discharges from potable water sources.

(4) Discharges of non-storm water to the MS4 from the following categories must be controlled by the requirements given below through statute, ordinance, permit, contract, order, or similar means. Discharges of non-storm water to the MS4 from the following categories not controlled by the requirements given below through statute, ordinance, permit, contract, order, or similar means must be addressed by the Copermittee as illicit discharges.

(a) Air conditioning condensation

The discharge of air conditioning condensation must be directed to landscaped areas or other pervious surfaces where feasible;

(b) Individual residential vehicle washing and group or fundraising car washes:

(i) The discharge of wash water must be directed to landscaped areas or other pervious surfaces ~~where feasible~~so that no wash water leaves the property and enters the MS4, and

(ii) ~~Minimize the use of water for vehicle washing, use as little washing detergent and other vehicle wash products as possible,~~ wash vehicles at commercial wash facilities if it is infeasible to direct wash water to landscaped areas or other pervious surfaces so that no wash water leaves the residential property~~, and implement other practices or behaviors that will prevent the discharge of pollutants associated with individual residential vehicle washing from entering the MS4~~; and

(c) Dechlorinated swimming pool discharges

(i) Eliminate residual chlorine, algaecide, filter backwash, or other pollutants from swimming pools prior to discharging to the sanitary sewer, ~~the MS4~~landscaped areas, or other pervious surfaces that can accommodate the volume of water, and

(ii) The discharge of saline swimming pool water to the MS4 must be directed to the sanitary sewer, landscaped areas, or other pervious surfaces that can accommodate the volume of water.

(5) Firefighting discharges to the MS4 must be addressed by the Copermittee as illicit discharges only if the Copermittee or the San Diego Water Board identifies the discharge as a significant source of pollutants to receiving waters. Firefighting discharges to the MS4 not identified as a significant source of pollutants to receiving waters, must be addressed, at a minimum, as follows:

(a) Non-emergency firefighting discharges

(i) Building fire suppression system maintenance discharges (e.g. sprinkler line flushing) to the MS4 must be addressed as illicit discharges.

(ii) Non-emergency firefighting discharges (i.e., discharges from controlled or practice blazes, firefighting training, and maintenance activities not associated with building fire suppression systems) must be addressed by a program, to be developed and implemented by the Copermittee, to reduce or eliminate pollutants in such discharges from entering the MS4.

(b) Emergency firefighting discharges

Each Copermittee must develop and encourage implementation of BMPs to reduce or eliminate pollutants in emergency firefighting discharges to the MS4s and receiving waters within its jurisdiction. During emergency situations, priority of efforts should be directed toward life, property, and the environment (in descending order). BMPs should not interfere with immediate emergency response operations or impact public health and safety.

(6) All non-stormwater discharges must be reduced, where feasible, whether or not they are otherwise exempted under Provisions E.2.a (1)- (5).

(7) If the Copermittee or San Diego Water Board identifies any category of non-storm water discharges listed under Provisions E.2.a.(1)-(4) as a source of pollutants to receiving waters, the category must be prohibited through ordinance, order, or similar means and addressed as an illicit discharge. ~~(6)~~

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b. PREVENT AND DETECT ILLICIT DISCHARGES AND CONNECTIONS

Each Copermittee must include the following measures within its program to prevent and detect illicit discharges to the MS4:

(1) Each Copermittee must maintain an updated map of its entire MS4 and the corresponding drainage areas. The accuracy of the MS4 map must be confirmed during non-storm water MS4 monitoring events. The MS4 map must be included as part of the jurisdictional runoff management program document. Any geographic information system (GIS) layers or files used by the Copermittee to maintain the MS4 map must be made available to the San Diego Water Board upon request. The MS4 map must identify the following:

(a) All segments of the MS4 owned, operated, and maintained by the Copermittee,

(b) All known locations of inlets that discharge and/or collect runoff into the

Copermittee's MS4,

(c) All known locations of connections with other MS4s not owned or operated by the Copermittee (e.g. Caltrans MS4s),

(d) All known locations of MS4 outfalls and private outfalls that discharge runoff collected from areas within the Copermittee's jurisdiction,

(e) All segments of receiving waters within the Copermittee's jurisdiction that receive and convey runoff discharged from the Copermittee's MS4 outfalls (i.e., receiving water segments that are both a receiving water and part of the MS4), and

(f) Locations of the non-storm water MS4 monitoring stations, identified pursuant to Provision D.1.a.(1)(a), within its jurisdiction;

(2) Each Copermittee must use Copermittee personnel and contractors to assist in identifying and reporting illicit discharges and connections during their daily activities;

(3) Each Copermittee must promote, publicize, and facilitate public reporting of the presence of illicit discharges or water quality impacts associated with discharges to or from the MS4. Each Copermittee must facilitate public reporting through development and operation of a public hotline. Public hotlines can be Copermittee-specific or shared by the Copermittees. All public hotlines must be capable of receiving reports in both English and Spanish 24 hours per day and seven days per week;

(a) Each Copermittee must designate an e-mail address for receiving e-mail pollution reports. The e-mail address must be prominently displayed on the Regional Clearinghouse and on the Copermittee's webpage.

(b) Each Copermittee must provide follow-up information regarding any public report submitted when the reporting individual specifically requests for follow-up information.

~~(3)~~(c) All Copermittees must make their hotline reporting database information available at least monthly on the regional clearinghouse. Minimum information to be provided shall include date of report, nature of complaint, follow up steps taken, and whether or not the complaint was resolved.

(4) Each Copermittee must implement practices and procedures (including a notification mechanism) to prevent, respond to, contain, and clean up any spills that may discharge into the MS4 from any source. The Copermittee must coordinate with spill response teams to prevent entry of spills into the MS4, and prevent contamination of surface water, ground water, and soil. The Copermittee must coordinate spill prevention, containment, and response activities throughout all appropriate Copermittee departments, programs, and

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agencies; and

(5) Each Copermittee must implement practices and procedures to prevent and limit infiltration of seepage from sanitary sewers (including private laterals and failing septic systems) to the MS4.

c. FIELD SCREENING AND MONITORING

Each Copermittee must conduct field screening and monitoring of MS4 outfalls and other portions of its MS4 within its jurisdiction to detect non-storm water and illicit discharges and connections to the MS4 in accordance with the jurisdictional non-storm water MS4 monitoring program requirements in Provision D.1.a.(1).

In lieu of field screening and monitoring, Copermittees may elect to install a network of flow meters to detect illicit flows.

d. INVESTIGATE AND ELIMINATE ILLICIT DISCHARGES AND CONNECTIONS

Each Copermittee must include the following measures within its program to investigate and eliminate illicit discharges to the MS4:

(1) Each Copermittee must prioritize and determine when follow-up investigations will be performed in response to water quality monitoring data collected during an investigation of a detected non-storm water or illicit discharge to or from the MS4. The criteria for follow-up investigations must include the following:

(a) Pollutants identified as causing or contributing to the highest water quality priorities identified in the Water Quality Improvement Plan;

(b) Pollutants identified as causing or contributing, or threatening to cause or contribute to impairments in water bodies on the 303(d) List and/or in environmentally sensitive areas (ESAs), located within its jurisdiction;

(c) Pollutants identified from sources or land uses known to exist within the area, drainage basin, or watershed that discharges to the portion of the MS4 within its jurisdiction included in the investigation;

(d) Pollutants identified as causing or contributing to and exceedance of an NAL described in Provision C.1; and

(e) Pollutants identified as a threat to human health or the environment.

(2) Each Copermittee must implement procedures to investigate and inspect portions of its MS4 that, based on reports or notifications, field screening and monitoring, or other appropriate information, indicate a reasonable potential of receiving, containing, or discharging pollutants due to illicit discharges, illicit connections, or other sources of non-storm water. The procedures must include the following:

(a) Each Copermittee must respond to each report or notification (e.g., public hotline reports, staff or contractor reports and notifications, etc.) of an incident in a timely manner. The Copermittee may develop criteria to assess the validity of, and prioritize the response to, each report or notification received;

(b) Each Copermittee must immediately investigate and seek to identify the source(s) of discharges of non-storm water where flows are observed in and from the MS4 during the field screening and monitoring required pursuant to Provision D.1.a.(1). The investigation must include field investigations to identify sources or potential sources for the discharge, unless the source or potential source has already been identified during previous investigations;

(c) Each Copermittee must investigate and seek to identify the source(s) of non-storm water discharges from the MS4 where there is evidence of non-storm water having been discharged into or from the MS4 (e.g., pooled

water). The investigation may include field investigations, reviewing Copermittee inventories, and other land use data to identify potential sources of the discharge; and

(d) Each Copermittee must maintain records and a database of the investigations, including the following information:

(i) Location of incident, including hydrologic subarea, portion of MS4 receiving the non-storm water or illicit discharge, and point of discharge or potential discharge from MS4 to receiving water,

(ii) Source of information initiating the investigation (e.g., public hotline reports, staff or contractor reports and notifications, monitoring data, etc.),

(iii) Date the information used to initiate the investigation was received,

(iv) Date the investigation was initiated,

(v) Dates of follow-up investigations,

(vi) Identified or suspected source of the illicit discharge or connection, if determined,

(vii) Known or suspected related incidents, if any,

(viii) Result of the investigation, and

(ix) If a source cannot be identified and the investigation is not continued, a rationale for why a discharge does not pose a threat to water quality and/or does not require additional investigation.

(3) Each Copermittee must initiate the implementation of procedures, in a timely manner, to eliminate all detected and identified illicit discharges and connections within its jurisdiction. The procedures must include the following:

(a) Each Copermittee must enforce its legal authority, as required under Provision E.1, to eliminate illicit discharges and connections to its MS4. If the Copermittee identifies the source as a controllable source of non-storm water or illicit discharge or connection, the Copermittee must implement its Enforcement Response Plan pursuant to Provision E.6 and enforce its legal authority to prohibit and eliminate illicit discharges and connections to its MS4;

(b) If the Copermittee identifies the source of the discharge as a category of non-storm water discharges in Provision E.2.a, and the discharge to or from the MS4 is in exceedance of NALs developed under Provision C.1, then the Copermittees must determine if this is an isolated incident or set of circumstances, or if the category of discharge must be addressed through the prohibition of that category of discharge as an illicit discharge pursuant to Provision E.2.a.(6);

(c) If the Copermittee suspects the source of the non-storm water discharge as natural in origin (i.e. non-anthropogenically influenced) and in conveyance into the MS4, then the Copermittee must collect the data and evidence necessary to demonstrate to the San Diego Water Board that it is natural in origin; and

(d) If the Copermittee is unable to identify and document the source of a recurring non-storm water discharge to or from the MS4, then the Copermittee must address the discharge as an illicit discharge and update its jurisdictional runoff management program to address the common and suspected sources of the non-storm water discharge within its jurisdiction in accordance with the Copermittee's priorities.

(4) Each Copermittee must submit a summary of the non-storm water discharges and illicit discharges and connections investigated and eliminated within its jurisdiction with each Annual Report required under Provision F.3.b of this Order.

3. Development Planning

Each Copermittee must use their land use/planning authorities to implement a development planning program that includes, at a minimum, the following requirements.

a. PERMANENT BMP REQUIREMENTS FOR ALL DEVELOPMENT PROJECTS

Each Copermittee must prescribe the following BMP requirements during the planning process (i.e. prior to project approval and issuance of grading or building permits) for all development projects (regardless of project type or size), where local permits are issued, including unpaved roads and flood management projects:

(1) General Requirements

(a) All BMPs must be located so as to remove pollutants from runoff prior to its discharge to any receiving waters, and as close to the source as possible;

(b) Multiple development projects may use shared permanent BMPs as long as construction of any shared BMP is completed prior to the use or occupation of any development project from which the BMP will receive runoff; and

(c) Permanent BMPs must not be constructed within a waters of the U.S. or waters of the state.

(2) Source Control BMP Requirements

The following source control BMPs must be implemented at all development projects where applicable and feasible:

(a) Prevention of illicit discharges into the MS4;

(b) Storm drain system stenciling or signage;

(c) Properly designed outdoor material storage areas;

(d) Properly designed outdoor work areas;

(e) Properly designed trash storage areas; and

(f) Any additional BMPs necessary to minimize pollutant generation at each project.

(3) Low Impact Development (LID) BMP Requirements

The following LID BMPs must be implemented at all development projects where applicable and feasible:

(a) Maintenance or restoration of natural storage reservoirs and drainage corridors (including topographic depressions, areas of permeable soils, natural swales, and ephemeral and intermittent streams);[14]

(b) Buffer zones for natural water bodies (where buffer zones are technically infeasible, require project applicant to include other buffers such as trees, access restrictions, etc.);

(c) Conservation of natural areas within the project footprint including existing trees, other vegetation, and soils;

(d) Construction of streets, sidewalks, or parking lot aisles to the minimum widths necessary, provided public safety is not compromised;

(e) Minimization of the impervious footprint of the project;

(f) Minimization of soil compaction to landscaped areas;

(g) Disconnection of impervious surfaces through distributed pervious areas;

[14] Development projects proposing to dredge or fill materials in waters of the U.S. must obtain a CWA Section 401 Water Quality Certification. Projects proposing to dredge or fill waters of the State must obtain Waste Discharge Requirements.

(h) Landscaped or other pervious areas designed and constructed to effectively receive and infiltrate, retain and/or treat runoff from impervious areas, prior to discharge to the MS4;

(i) Small collection strategies located at, or as close as possible to, the source (i.e. the point where storm water initially meets the ground) to minimize the transport of runoff and pollutants to receiving waters;

(j) Use of permeable materials for projects with low traffic areas and appropriate soil conditions;

(k) Landscaping with native or drought tolerant species; and

(l) Harvesting and using precipitation.

(4) Long-Term Permanent BMP Maintenance

Each Copermittee must require the project applicant to submit proof of the mechanism under which ongoing long-term maintenance of all permanent BMPs will be conducted.

(5) Infiltration and Groundwater Protection

(a) Infiltration and treatment control BMPs designed to primarily function as large, centralized infiltration devices (such as large infiltration trenches and infiltration basins) must not cause or contribute to an exceedance of an applicable groundwater quality objective. At a minimum, such infiltration and treatment control BMPs must be in conformance with the design criteria listed below, unless the development project applicant demonstrates to the Copermittee that one or more of the specific design criteria listed below are not necessary to protect groundwater quality. The design criteria listed below do not apply to small infiltration systems dispersed throughout a development project.

(i) Runoff must undergo pretreatment such as sedimentation or filtration prior to infiltration;

(ii) Pollution prevention and source control BMPs must be implemented at a level appropriate to protect groundwater quality at sites where infiltration treatment control BMPs are to be used;

(iii) Infiltration treatment control BMPs must be adequately maintained to remove pollutants in storm water to the MEP;

(iv) The vertical distance from the base of any infiltration treatment control BMP to the seasonal high groundwater mark must be at least 10 feet. Where groundwater basins do not support beneficial uses, this vertical distance criteria may be reduced, provided groundwater quality is maintained;

(v) The soil through which infiltration is to occur must have physical and chemical characteristics (e.g., appropriate cation exchange capacity, organic content, clay content, and infiltration rate) which are adequate for proper infiltration durations and treatment of runoff for the protection of groundwater beneficial uses;

(vi) Infiltration treatment control BMPs must not be used for areas of industrial or light industrial activity, and other high threat to water quality land uses and activities as designated by each Copermittee, unless first treated or filtered to remove pollutants prior to infiltration; and

(vii) Infiltration treatment control BMPs must be located a minimum of 100 feet horizontally from any water supply wells.

(b) The Copermittees may collectively or individually develop alternative mandatory design criteria to that listed above for infiltration and treatment control BMPs which are designed to primarily function as centralized infiltration devices. Before implementing the alternative design criteria in the development planning process the Copermitee(s) must:

(i) Notify the San Diego Water Board of the intent to implement the alternative design criteria submitted; and

(ii) Comply with any conditions set by the San Diego Water Board.

b. PRIORITY DEVELOPMENT PROJECTS

(1) Definition of Priority Development Project

Priority Development Projects include the following:

(a) All new development projects that fall under the Priority Development Project categories listed under Provision E.3.b.(2). Where a new development project feature, such as a parking lot, falls into a Priority Development Project category, the entire project footprint is subject to Priority Development Project requirements; and

(b) Those redevelopment projects that create, add, or replace at least 5,000 square feet of impervious surfaces on an already developed site, or the redevelopment project is a Priority Development Project category listed under Provision E.3.b.(2). Where redevelopment results in an increase of less than fifty percent of the impervious surfaces of a previously existing development, and the existing development was not subject to Priority Development Project requirements, the performance and sizing requirements discussed in Provisions E.3.c.(2) and E.3.c.(3) apply only to the addition or replacement, and not to the entire development. Where

redevelopment results in an increase of more than fifty percent of the impervious surfaces of a previously existing development, the performance and sizing requirements apply to the entire development.

(2) Priority Development Project Categories

(a) New development projects that create 10,000 square feet or more of impervious surfaces (collectively over the entire project site). This category includes commercial, industrial, residential, mixed-use, and public development projects on public or private land which fall under the planning and building authority of the Copermittee.

(b) Automotive repair shops. This category is defined as a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.

(c) Restaurants. This category is defined as 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), where the land area for development is 5,000 square feet or more.

(d) Hillside development projects. This category includes any development which creates 5,000 square feet or more of impervious surface which is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.

(e) Environmentally sensitive areas (ESAs). This category includes any development located within, directly adjacent to, or discharging directly to an ESA, which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10 percent or more of its naturally occurring condition. "Directly adjacent to" means situated within 200 feet of the ESA. "Discharging directly to" means outflow from a drainage conveyance system that collects runoff from the subject development or redevelopment site and terminates at or in receiving waters within the ESA.

(f) Parking lots. This category is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce that has 5,000 square feet or more of impervious surface.

(g) Streets, roads, highways, freeways, and residential driveways. This category is defined as any paved impervious surface that is 5,000 square feet or more used for the transportation of automobiles, trucks, motorcycles, and other vehicles.

(h) Retail gasoline outlets (RGOs). This category includes RGOs that meet the following criteria: (a) 5,000 square feet or more or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.

(i) Large development projects. This category includes any post-construction pollutant-generating new development projects that result in the disturbance of one acre or more of land.

(3) Priority Development Project Exemptions

Each Copermittee has the discretion to exempt the following projects from being defined as Priority Development Projects:

(a) Sidewalks constructed as part of new streets or roads and designed to direct storm water runoff to adjacent vegetated areas;

(b) Bicycle lanes that are constructed as part of new streets or roads but are not hydraulically connected to the new streets or roads and designed to direct storm water runoff to adjacent vegetated areas;

(c) Impervious trails constructed and designed to direct storm water runoff to adjacent vegetated areas, or other non-erodible permeable areas;

(d) Sidewalks, bicycle lanes, or trails constructed with permeable surfaces.

c. PRIORITY DEVELOPMENT PROJECT PERMANENT BMP PERFORMANCE AND SIZING REQUIREMENTS

In addition to the BMP requirements listed for all development projects under Provision E.3.a, Priority Development Projects must also implement permanent BMPs that conform to performance and sizing requirements.

(1) Source Control BMP Requirements

Each Copermittee must require each Priority Development Project to implement applicable source control BMPs listed under Provision E.3.a.(2).

(2) Retention and Treatment Control BMP Requirements

Each Copermittee must require each Priority Development Project to implement BMPs to retain and treat pollutants onsite in the following order:

(a) Each Priority Development Project must be required to implement LID BMPs as described in Provision E.3.a.(3);

(b) Each Priority Development Project must be required to implement LID BMPs that are sized and designed to retain the volume equivalent to runoff produced from a 24-hour 85th percentile storm event[15] ("design capture volume");

(c) If onsite retention using LID BMPs is technically infeasible per Provision E.3.c.(4), flow-thru LID and/or conventional treatment control BMPs must be implemented to treat the portion of the design capture volume that is not retained onsite. Flow-thru LID treatment control BMPs must be designed for an appropriate surface loading rate to prevent erosion, scour and channeling within the BMP. Additionally, project applicants must perform mitigation for the portion of the pollutant load in the design capture volume that is not retained onsite, as described in Provision E.3.c.(4)(c).

(d) All onsite treatment control BMPs must:

(i) Be correctly sized and designed so as to remove pollutants from storm water to the MEP;

(ii) Be sized to comply with the following numeric sizing criteria:

[a] Volume-based treatment control BMPs must be designed to mitigate (infiltrate, filter, or treat) the remaining portion of the design capture volume that was not retained onsite; or

[b] Flow-based treatment control BMPs must be designed to mitigate (filter or treat) either: 1) the maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour, for each hour of a storm event; or 2) the maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity (for each hour of a storm event), as determined from the local historical rainfall record, multiplied by a factor of two.

(iii) Be ranked with high or medium pollutant removal efficiency for the project's most significant pollutants of concern. Treatment control BMPs with a low removal efficiency ranking must only be approved by a Copermittee when a feasibility analysis has been conducted

[15] This volume is not a single volume to be applied to all areas covered by this Order. The size of the 85th percentile storm event is different for various parts of the San Diego Region. The Copermittees are encouraged to calculate the 85th percentile storm event for each of its jurisdictions using local rain data pertinent to its particular jurisdiction. In addition, isopluvial maps may be used to extrapolate rainfall data to areas where insufficient data exists in order to determine the volume of the local 85th percentile storm event in such areas. Where the Copermittees will use isopluvial maps to determine the 85th percentile storm event in areas lacking rain data, the Copermittees must describe their method for using isopluvial maps in its BMP Design Manuals.

which exhibits that implementation of treatment control BMPs with high or medium removal efficiency rankings are infeasible for a Priority Development Project or portion of a Priority Development Project.

(3) Hydromodification Management BMP Requirements

Each Copermittee must require each Priority Development Project to implement hydromodification management BMPs so that:

(a) Post-project runoff flow rates and durations do not exceed pre-development (naturally occurring) runoff flow rates and durations ~~by more than 10 percent~~ (for the range of flows that result in increased potential for erosion ~~or~~, degraded channel conditions, impaired stream habitat, or negatively impacted beneficial uses downstream of Priority Development Projects).

~~(i) In evaluating the range of flows that results in increased potential for erosion of natural (non-hardened) channels, the lower boundary must correspond with the critical channel flow that produces the critical shear stress that initiates channel bed movement or that erodes the toe of channel banks.~~

~~(ii) For artificially hardened channels, analysis to identify the lower boundary must use characteristics of a natural stream segment similar to that found in the watershed. The lower boundary must correspond with the critical channel flow that produces the critical shear stress that initiates channel bed movement or erodes the toe of the channel banks.~~

~~(iii) The Copermittees may use monitoring results pursuant to Provision D.2.b.(6) to re-define the range of flows resulting in increased potential for erosion or degraded channel conditions, as warranted by the data.~~

(b) Post-project runoff flow rates and durations must compensate for the loss of sediment supply due to the development project, should loss of sediment supply occur as a result of the development project.

(c) If hydromodification management BMPs are technically infeasible per Provision E.3.c.(4), project applicants must perform mitigation for the portion of the runoff volume that is not controlled and will cause or contribute to increased potential for erosion of receiving waters downstream of the Priority Development Project, as described in Provision E.3.c.(4)(c).

(d) Exemptions

Each Copermittee has the discretion to exempt a Priority Development Project from the hydromodification management BMP requirements where the project:

(i) Discharges storm water runoff into underground storm drains discharging directly to water storage reservoirs, lakes, enclosed embayments, or the Pacific Ocean;

(ii) Discharges storm water runoff into conveyance channels whose bed and bank are concrete lined all the way from the point of discharge to water storage reservoirs, lakes, enclosed embayments, or the Pacific Ocean; or

(iii) Discharges storm water runoff into other areas identified by the San Diego Water Board as exempt from the requirements of Provisions E.3.c.(3)(a)-(c).

(4) Alternative Compliance for Technical Infeasibility

At the discretion of each Copermittee, alternative compliance may be allowed for certain Priority Development Projects to comply with Provisions E.3.c.(2) and E.3.c.(3), subject to the following requirements:

(a) Applicability

Priority Development Projects may be allowed alternative compliance if:

(i) The Copermittee reviews and approves site-specific hydrologic and/or design analysis performed by a registered professional engineer, geologist, architect, or landscape architect;

(ii) The project applicant demonstrates, and the Copermittee determines and documents, that retention LID and/or hydromodification management BMPs per Provisions E.3.c.(2) and E.3.c.(3) were incorporated into the project design to the maximum extent technically feasible given the project site conditions;

(iii) The project applicant is required to perform mitigation described in Provision E.3.c.(4)(c) with a net result of at least the same level of water quality protection as would have been achieved if the Priority Development Project had fully implemented the retention LID and hydromodification management BMP requirements under Provisions E.3.c.(2) and E.3.c.(3) onsite.

(b) Criteria For Technical Infeasibility

Each Copermittee must develop, or develop in collaboration with the other Copermittees, criteria to determine technical infeasibility for fully

implementing the retention LID and hydromodification management BMP requirements under Provisions E.3.c.(2) and E.3.c.(3) and include these requirements in the Permanent BMP Sizing Criteria Design Manual pursuant to Provision E.3.d. Technical infeasibility may result from conditions including, but not limited to:

(i) Locations that cannot meet the infiltration and groundwater protection requirements in Provision E.3.a.(5) due to the presence of shallow bedrock, contaminated soils, near surface groundwater, underground facilities, or utilities;

(ii) Brownfield development sites or other locations where pollutant mobilization is a documented concern;

(iii) The design of the site precludes the use of soil amendments, plantings of vegetation, or other designs that can be used to infiltrate and evapotranspirate runoff;

(iv) Soils cannot be sufficiently amended to provide for the requisite infiltration rates;

(v) Locations with geotechnical hazards;

(vi) Insufficient onsite and/or offsite demand for storm water use;

(vii) Modifications to an existing building to manage storm water are not feasible due to structural or plumbing constraints; and

(viii) Smart growth and infill or redevelopment locations where the density and/or nature of the project would create significant difficulty for compliance with Provisions E.3.c.(2) and E.3.c.(3) onsite.

(c) Mitigation

Priority Development Projects that meet the Copermittee's technical infeasibility criteria developed pursuant to Provision E.3.c.(4)(b) must be required to mitigate for the increased flow rates, increased flow durations, and/or increased pollutant loads expected to be discharged from the site. For the pollutant load in the volume of storm water not retained onsite with retention LID BMPs, or increased potential erosion of downstream receiving waters not fully controlled onsite with hydromodification management BMPs, the Copermittee must require the project applicant to either 1) implement an offsite mitigation project, and/or 2) provide sufficient funding for a public or private offsite mitigation project via a mitigation fund.

(i) *Mitigation Project Locations*

Offsite mitigation projects must be implemented within the same hydrologic unit as the Priority Development Project, and preferably within the same hydrologic subarea. Mitigation projects outside of

the hydrologic subarea but within the same hydrologic unit may be approved provided that the project applicant demonstrates that mitigation projects within the same hydrologic subarea are infeasible and that the mitigation project will address similar potential impacts expected from the Priority Development Project.

(ii) *Mitigation Project Types*

Offsite mitigation projects must include, where applicable and feasible, retrofitting opportunities and stream and/or habitat rehabilitation or restoration opportunities identified in the Water Quality Improvement Plans, identified pursuant to Provision B.3.a. Other offsite mitigation projects may include green streets or infrastructure projects, or regional BMPs upstream of receiving waters. In-stream rehabilitation or restoration measures to protect or prevent adverse physical changes to creek bed and banks must not include the use of non-naturally occurring hardscape material such as concrete, riprap, or gabions. Project applicants seeking to utilize these alternative compliance provisions may propose other offsite mitigation projects, which the Copermittees may approve if they meet the requirements of Provision E.3.c.(4)(a).

(iii) *Mitigation Project Timing*

The Copermittee and/or project applicant must develop a schedule for the completion of offsite mitigation projects, including milestone dates to identify, fund, design, and construct the projects. Offsite mitigation projects must be completed upon the granting of occupancy for the first project that contributed funds toward the offsite mitigation project, unless a longer period is authorized by the San Diego Water Board.

(iv) *Mitigation Fund*

A Copermittee may choose to implement additional mitigation programs (e.g., pollutant credit system, mitigation fund) as a means for developing and implementing offsite mitigation projects, provided the projects conform to the requirements for project locations, types, and timing described above.

d. UPDATE PERMANENT BMP SIZING CRITERIA DESIGN MANUAL (BMP DESIGN MANUAL)

Each Copermittee must update its Permanent BMP Sizing Criteria Design Manual (BMP Design Manual)[16] pursuant to Provision F.2.b or Provision F.5.a. Until the Copermittee has updated its BMP Design Manual with the requirements of Provision E.3.c, the Copermittee must continue implementing its current BMP Design Manual. Unless directed otherwise by the San Diego Water Board, the

[16] The Permanent BMP Sizing Criteria Design Manual was formerly known as the Standard Storm Water Mitigation Plan under Order Nos. R9-2007-0001, R9-2009-0002, and R9-2010-0016.

Copermittee must implement the BMP Design Manual within 180 days of completing the update. The update of the BMP Design Manual must include the following:

(1) Updated procedures to determine the nature and extent of storm water requirements applicable to a potential development or redevelopment project. These procedures must inform project applicants of the storm water management requirements applicable to their project including, but not limited to, general requirements for all development projects, LID and conventional BMP design procedures and requirements, hydromodification management requirements, requirements specific to phased projects, and procedures specific to private developments and public improvement projects;

(2) Updated procedures to identify pollutants and conditions of concern for selecting the most appropriate permanent BMPs that consider, at a minimum, the following:

(a) Receiving water quality (including pollutants for which receiving waters are listed as impaired under CWA section 303(d));

(b) Priority pollutants or receiving water conditions contributing to the highest water quality priorities identified in the Water Quality Improvement Plan;

(c) Land use type of the project and pollutants associated with that land use type; and

(d) Pollutants expected to be present onsite.

(3) Updated procedures for designing permanent BMPs, including any updated performance and sizing requirements to be consistent with the requirements of Provision E.3.c for all BMPs listed in the BMP Design Manual;

(4) Long-term maintenance criteria for each BMP listed in the BMP Design Manual; and

(5) Criteria and mitigation requirements, in accordance with the requirements under Provision E.3.c.(4), if the Copermittee elects to allow alternative compliance for technical infeasibility within its jurisdiction.

e. PRIORITY DEVELOPMENT PROJECT BMP IMPLEMENTATION AND OVERSIGHT

Each Copermittee must implement a program to ensure permanent BMPs on all Priority Development Projects are designed, constructed, and maintained to remove pollutants in storm water to the MEP.

(1) Permanent BMP Approval and Verification Process

(a) Each Copermittee must ensure that for all Priority Development Project applications that have not received prior lawful approval by the Copermittee by 12 months after the adoption of this Order, or pursuant to Provision F.5.a, the requirements of Provision E.3 are implemented. For project applications that have received prior lawful approval by 12 months after the adoption of this Order, or pursuant to Provision F.5.a, the Copermittee may allow previous land development requirements to apply.

(b) Each Copermittee must identify the roles and responsibilities of various municipal departments in implementing the permanent BMP requirements, including each stage of a project from application review and approval through BMP maintenance and inspections.

(c) Each Copermittee must ensure that appropriate easements and ownerships are properly recorded in public records and the information is conveyed to all appropriate parties when there is a change in project or site ownership.

(d) Each Copermittee must ensure that prior to occupancy and/or intended use of any portion of the Priority Development Project, each permanent BMP must be inspected to verify that they have been constructed and are operating in compliance with all of its specifications, plans, permits, ordinances, and the requirements of this Order.

(2) Priority Development Project Inventory and Prioritization

(a) Each Copermittee must develop and continuously maintain a watershed-based database to track and inventory all Priority Development Projects and associated permanent BMPs. Inventories must be accurate and complete beginning from January 2002 for the San Diego County Copermittees, February 2003 for the Orange County Copermittees, and July 2005 for the Riverside County Copermittees. The database must include, at a minimum, the following information:

(i) Priority Development Project location (address and hydrologic subarea);

(ii) Descriptions of BMP type(s);

(iii) Date(s) of construction;

(iv) Party responsible for permanent BMP maintenance;

(v) Dates and findings of permanent BMP maintenance verifications; and

(vi) Corrective actions and/or resolutions.

(b) Each Copermittee must prioritize the Priority Development Projects with permanent BMPs within its jurisdiction. The designation of Priority Development Projects as high priority must consider the following:

(i) The highest water quality priorities identified in the Water Quality Improvement Plan;

(ii) Receiving water quality;

(iii) Number and sizes of permanent BMPs;

(iv) Recommended maintenance frequency of permanent BMPs;

(v) Likelihood of operation and maintenance issues of permanent BMPs;

(vi) Land use and expected pollutants generated; and

(vii) Compliance record.

(3) Permanent BMP Maintenance Verifications and Inspections

Each Copermittee is required to verify that permanent BMPs on each Priority Development Project are adequately maintained, and continue to operate effectively to remove pollutants in storm water to the MEP through inspections, self-certifications, surveys, or other equally effective approaches.

(a) All (100 percent) of the permanent BMPs at Priority Development Projects that are designated as high priority must be inspected directly by the Copermittee annually prior to each rainy season;

(b) For verifications performed through a means other than direct Copermittee inspection, adequate documentation must be required by the Copermittee to provide assurance that the required maintenance of permanent BMPs at each Priority Development Project has been completed; and

(c) Appropriate follow-up measures (including re-inspections, enforcement, etc.) must be conducted to ensure that permanent BMPs at each Priority Development Project continue to reduce pollutants in storm water to the MEP as originally designed.

f. DEVELOPMENT PROJECT ENFORCEMENT

Each Copermittee must enforce its legal authority established pursuant to Provision E.1 for all development projects, as necessary, to achieve compliance with the requirements of this Order, in accordance with its Enforcement Response Plan pursuant to Provision E.6.

4. Construction Management

Each Copermittee must implement a construction management program that includes, at a minimum, the following requirements:

a. PROJECT APPROVAL PROCESS

Prior to approval and issuance of any construction, grading, or building permits for a project each Copermittee must:

(1) Require a project-specific storm water pollution prevention plan (SWPPP), or equivalent construction BMP or erosion control plan, to be submitted by the project applicant for the Copermittee's approval;

(2) Ensure the SWPPP, or equivalent construction BMP or erosion control plan, complies with the local grading ordinance, other applicable local ordinances, and the requirements of this Order;

(3) Ensure the SWPPP, or equivalent construction BMP or erosion control plan, includes seasonally appropriate and effective BMPs and management measures described in Provision E.4.c, as applicable to the project; and

(4) Verify that the project applicant has obtained coverage under applicable permits, including, but not limited to the Construction General Permit, Clean Water Act Section 401 Water Quality Certification and Section 404 Permit, and California Department of Fish and Game Streambed Alteration Agreement.

b. CONSTRUCTION SITE INVENTORY AND TRACKING

(1) Each Copermittee must maintain, and update at least monthly, a watershed-based inventory of all construction sites requiring construction, grading, or building permits within its jurisdiction. The inventory must include:

(a) Relevant contact information for each site (e.g., name, address, phone, and email for the owner and contractor);

(b) The basic site information including location (address and hydrologic subarea), Waste Discharge Identification (WDID) number (if applicable), size of the site, and approximate area of disturbance;

(c) Whether or not the site is considered a high threat to water quality, as defined in Provision E.4.b.(2) below;

(d) The project start and anticipated completion dates;

(e) Current construction phase;

(f) The required inspection frequency, as defined in the Copermittee's jurisdictional runoff management program document;

(g) The date the Copermittee approved the project-specific SWPPP, or equivalent construction BMP or erosion control plan; and

(h) Whether or not there are ongoing enforcement actions administered to the site.

(2) Each Copermittee must identify all construction sites within its jurisdiction that represent a high threat to downstream surface water quality. At a minimum, high threat to water quality sites must include:

(a) Sites located within a hydrologic subarea where sediment is known or suspected to contribute to the highest water quality priorities identified in the Water Quality Improvement Plan;

(b) Sites located within the same hydrologic subarea and tributary to a CWA section 303(d) water body segment impaired for sediment;

(c) Sites located within, directly adjacent to, or discharging directly to a receiving water within an ESA; and

(d) Other sites determined by the Copermittees or the San Diego Water Board as a high threat to water quality.

c. CONSTRUCTION SITE BMP AND MANAGEMENT MEASURE IMPLEMENTATION

Each Copermittee must implement, or require the implementation of effective BMPs to reduce discharges of pollutants in storm water from construction sites to the MEP, and prevent non-storm water discharges into the MS4. These BMPs must be site specific, seasonally appropriate, and construction phase appropriate. BMPs and management measures must be implemented at each construction site year round. Dry season BMP implementation must plan for and address unseasonal rain events that may occur during the dry season (May 1 through September 30). Copermittees must implement, or require the implementation of, BMPs and management measures in the following categories:

(1) Project Planning;

(2) Good Site Management "Housekeeping", including waste management;

(3) Non-storm Water Management;

(4) Erosion Control;

(5) Sediment Control;

(6) Run-on and Run-off Control; and

(7) Active/Passive Sediment Treatment Systems, where applicable.

d. CONSTRUCTION SITE INSPECTIONS

Each Copermittee must conduct construction site inspections to ensure compliance with its permits and applicable local ordinances, and the requirements of this Order. Priority for site inspections must consider threat to water quality pursuant to Provision E.4.b as well as the nature of the construction activity, topography, and the characteristics of soils and receiving water quality.

(1) Inspection Frequency

(a) Each Copermittee must conduct inspections at all inventoried sites, including high threat to water quality sites, at an appropriate frequency for each phase of construction to ensure the site reduces the discharge of pollutants in storm water from construction sites to the MEP, and prevents non-storm water discharges from entering the MS4.

(b) Each Copermittee must establish appropriate inspection frequencies for high threat to water quality sites, and all other sites, for each phase of construction. Inspection frequencies appropriate for addressing the highest water quality priorities identified in the Water Quality Improvement Plan, and for complying with the requirements of this Order must be identified in each Copermittee's jurisdictional runoff management program document.

(c) Based upon inspection findings, each Copermittee must implement all follow-up actions (i.e., re-inspection, enforcement) necessary to ensure site compliance with its permits and applicable local ordinances, and the requirements of this Order.

(2) Inspection Content

Inspections of construction sites by the Copermittee must include, at a minimum:

(a) Verification of coverage under the Construction General Permit (Notice of Intent (NOI) and/or WDID number) during initial inspections, when applicable;

(b) Assessment of compliance with its permits and applicable local ordinances related to pollution prevention, including the implementation and maintenance of applicable BMPs;

(c) Assessment of BMP adequacy and effectiveness;

(d) Visual observations of actual non-storm water discharges;

(e) Visual observations of actual or potential discharge of sediment and/or construction related materials from the site;

(f) Visual observations of actual or potential illicit connections; and

(g) If any violations are found and BMP enhancements are needed, inspectors must take and document appropriate actions in accordance with the Enforcement Response Plan pursuant to Provision E.6.

(3) Inspection Tracking and Records

Each Copermittee must track all inspections and re-inspections at all inventoried construction sites. The Copermittee must retain all inspection records in an electronic database or tabular format, which must be made available to the San Diego Water Board upon request. Inspection records must include, at a minimum:

(a) Site name, location (address and hydrologic subarea), and WDID number (if applicable);

(b) Inspection date;

(c) Weather conditions during inspection;

(d) Approximate amount of rainfall since last inspection;

(e) Description and photo documentation of problems observed with BMPs and indication of need for BMP addition/repair/replacement and any scheduled re-inspection, and date of re-inspection;

(f) Descriptions of any other specific inspection comments which must, at a minimum, include rationales for longer compliance time.;

(g) Description of enforcement actions issued in accordance with the Enforcement Response Plan pursuant to Provision E.6; and

(h) Resolution of problems noted and date problems fixed.

e. CONSTRUCTION SITE ENFORCEMENT

Each Copermittee must enforce its legal authority established pursuant to Provision E.1 for all its inventoried construction sites, as necessary, to achieve compliance with the requirements of this Order, in accordance with its Enforcement Response Plan pursuant to Provision E.6.

5. Existing Development Management

Each Copermittee must implement an existing development management program that includes, at a minimum, the following requirements:

a. EXISTING DEVELOPMENT INVENTORY AND TRACKING

Each Copermittee must maintain an updated watershed-based inventory of all its existing development that may potentially generate a pollutant load to and from the MS4. The use of an automated database system, such as GIS, is highly recommended. The inventory must, at a minimum, include:

(1) Name, location (address and hydrological subarea) of each facility, area, and/or activity;

(2) A description of the facility, area, and/or activity, including classification as municipal, commercial, industrial, or residential;

(3) The following municipal facilities:

(a) Flood management and flood control devices and structures,

(b) Operating or closed municipal landfills,

(c) Publicly owned treatment works (including water and wastewater treatment plants) and sanitary sewer collection systems,

(d) Corporate yards, including maintenance and storage yards for materials, waste, equipment, and vehicles,

(e) Hazardous waste collection facilities, and

(f) Other treatment, storage or disposal facilities for municipal waste;

(4) Identification if a business is a mobile business;

(5) SIC Code, if applicable;

(6) Industrial General Permit NOI and/or WDID number, if applicable;

(7) Identification if an area is a Common Interest Area (CIA) / Home Owner Association (HOA), or mobile home park;

(8) Identification of pollutants generated and potentially generated by the facility, area, and/or activity;

(9) Status of facility, area, and/or activity as active or inactive;

(10) Whether the facility, area, and/or activity is adjacent to an ESA;

(11) Whether the facility, area, and/or activity is tributary to and within the same hydrologic subarea as a CWA section 303(d) water body segment and generates pollutants for which the water body segment is impaired;

(12) Whether the facility, area, and/or activity contributes or potentially contributes to the highest water quality priorities identified in the Water Quality Improvement Plan; and

(13) A continually updated map showing the location of inventoried existing development, watershed boundaries, water bodies, and pollutants generated at the inventoried existing development.

b. RETROFITTING AND CHANNEL REHABILITATION IN AREAS OF EXISTING DEVELOPMENT

Each Copermittee must develop and implement a program to retrofit areas of existing development to reduce the discharge of pollutants in storm water from the MS4 to the MEP and effectively prohibit non-storm water discharges into its MS4, and rehabilitate channels to restore impaired beneficial uses of streams within its jurisdiction.

(1) Each Copermittee must identify areas of existing development as candidates for retrofitting, and channels in areas of existing development as candidates for rehabilitation within its jurisdiction. Areas of existing development must be selected based on a likelihood that retrofitting and channel rehabilitation will address the highest water quality priorities identified in the Water Quality Improvement Plan prepared pursuant to Provision B.

(2) Each Copermittee must evaluate and rank the areas of existing development identified pursuant to Provisions E.5.a and E.5.b.(1) for retrofitting and channel rehabilitation. The evaluation must include an assessment of those areas where pollutant removal from storm water and effective prohibition of non-storm water discharges through retrofitting existing development will provide the most benefit to water quality. The evaluation must also include an assessment of the channels within its jurisdiction where channel rehabilitation will improve beneficial uses of streams within the Copermittee's jurisdiction. Data collected during the implementation of the Water Quality Improvement Plan must be used to inform each area assessment and rank determination.

(3) Each Copermittee must implement retrofit and channel rehabilitation projects that address the highest water quality priorities identified in the Water Quality Improvement Plan pursuant to Provision B.3.a. The Copermittee must encourage private landowners to implement retrofit and channel rehabilitation projects whenever practical. Private landowners should be encouraged through the Copermittee's use of subsidies, penalties, or other incentives.

(4) Each Copermittee must evaluate the flood management and flood control devices and structures in its inventory to determine if it is feasible to retrofit the device or structure, to provide additional pollutant removal from storm water. A Copermittee must consider the highest water quality priorities identified in their Water Quality Improvement Plan as part of each assessment.

(5) Where retrofitting and channel rehabilitation within specific areas of existing development are determined to be infeasible to restore and protect receiving waters from the highest water quality priorities identified in the Water Quality Improvement Plan, each Copermittee must identify, develop, and implement regional retrofitting and channel rehabilitation projects (i.e. projects that can receive and/or treat storm water from one or more areas of existing development and will result in a net benefit to water quality and the environment) adjacent to and/or downstream of the areas of existing development. The Copermittees may collaborate and cooperate with each other to develop regional retrofitting and channel rehabilitation projects. The Copermittees are also encouraged to partner with existing efforts in other Watershed Management Areas, and the Integrated Regional Water Management (IRWM) Groups in San Diego County, South Orange County, and Southwest Riverside County.

c. EXISTING DEVELOPMENT BMP IMPLEMENTATION AND MAINTENANCE

(1) Pollution Prevention

Each Copermittee must require the use of pollution prevention methods by the inventoried existing development.

(2) Designate BMPs

Each Copermittee must designate a minimum set of BMPs required for all inventoried existing development, including special event venues, that have the potential to generate pollutants. The designated minimum BMPs must be specific to facility types and pollutant-generating activities, as appropriate.

(3) BMP Implementation

Each Copermittee must implement, or require the implementation of, designated BMPs at inventoried existing development that have the potential to generate pollutants. A Copermittee must require additional pollution prevention measures and enhanced BMPs at inventoried existing development that discharges pollutants identified as contributing to the highest water quality priorities in the Water Quality Improvement Plan.

(4) BMP Operation and Maintenance

Each Copermittee must operate and maintain, or require the operation and maintenance of designated BMPs at all inventoried existing development.

(a) Each Copermittee must implement a schedule of operation and maintenance activities for its MS4 and related structures (including but not limited to catch basins, storm drain inlets, detention basins, etc.), and verify proper operation of all its municipal structural treatment controls designed to reduce pollutants (including floatables) in storm water discharges to or from its MS4s and related drainage structures.

(b) Each Copermittee must implement procedures during the operation and maintenance of public streets, unpaved roads, paved roads, and paved highways and freeways that will reduce the contribution of storm water pollutants to the MEP and effectively prohibit non-storm water pollutants from the MS4 to receiving water bodies. During maintenance of unpaved roads, each Copermittee must examine the feasibility of replacing existing culverts or designing new culverts/bridge crossings to maintain natural stream geomorphology.

(c) Each Copermittee must implement controls to prevent infiltration of sewage into the MS4 from leaking sanitary sewers. Copermittees that operate both a municipal sanitary sewer system and a MS4 must implement controls and measures to prevent and eliminate seeping sewage from infiltrating the MS4. Copermittees that do not operate both a municipal sanitary sewer system and a MS4 must keep themselves informed of relevant and appropriate maintenance activities and sanitary sewage projects in their jurisdiction that may cause or contribute to seepage of sewage into the MS4.

(5) Pesticides, Herbicides, and Fertilizers BMPs

Each Copermittee must implement procedures, or require the implementation of procedures, to reduce the contribution of pollutants in storm water to the MEP and effectively prohibit non-storm water discharges associated with the application, storage, and disposal of pesticides, herbicides and fertilizers from inventoried existing development into and from the MS4s. The Copermittee must require additional pollution prevention measures and enhanced BMPs at inventoried existing development that discharges pesticides, herbicides, or fertilizers identified as contributing to the highest water quality priorities in the Water Quality Improvement Plan. Such BMPs must include, as appropriate educational activities, permits, certifications and other measures for applicators and distributors.

d. EXISTING DEVELOPMENT INSPECTIONS

Each Copermittee must conduct inspections of inventoried existing development to ensure compliance with applicable local ordinances and permits, and the requirements of this Order.

(1) Inspection Frequency

(a) Each Copermittee must establish appropriate inspection frequencies for inventoried existing development based on the priorities set forth in the Water Quality Improvement Plan, and the potential for discharging pollutants via storm water and non-storm water runoff. At a minimum, inventoried existing development must be inspected once every five years. Inventoried existing development must also be inspected within six months of any change in property ownership or change in pollutant generating activity. The frequency of inspection at inventoried existing development must be appropriate to ensure that applied BMPs are sufficient to reduce the discharge of pollutants in storm water from the MS4 to the MEP and effectively prohibit non-storm water discharges to the MS4.

(b) Inventoried existing development must be inspected, as needed, in response to valid public complaints and findings from the Copermittee's municipal and contract staff inspections.

(c) Based upon inspection findings, each Copermittee must implement all follow-up actions (i.e. re-inspection, enforcement) necessary to ensure compliance with its applicable local ordinances and permits, the most current jurisdictional runoff management program document, the Water Quality Improvement Plan, and the requirements of this Order.

(2) Inspection Content

Inspections of existing development by the Copermittee must include, at a minimum:

(a) Assessment of compliance with its applicable local ordinances and permits related to non-storm water and storm water discharges and runoff;

(b) Assessment of the implementation, maintenance and effectiveness of the designated minimum and/or enhanced BMPs;

(c) Verification of coverage under the Industrial General Permit (NOI and/or WDID number), when applicable;

(d) Visual observations of actual non-storm water discharges;

(e) Visual observations of actual or potential discharge of pollutants;

(f) Visual observations of actual or potential illicit connections; and

(g) If any violations are found and BMP enhancements are needed, inspectors must take and document appropriate actions in accordance with the Enforcement Response Plan pursuant to Provision E.6.

(3) Inspection Tracking and Records

Each Copermittee must track all inspections and re-inspections at all inventoried existing development. The Copermittee must retain all inspection records in an electronic database or tabular format, which must be made available to the San Diego Water Board upon request. Inspection records must be sufficiently detailed in order to determine compliance with the requirements of this Order and any progress made towards addressing the highest water quality priorities identified in the Water Quality Improvement Plan. Inspection records must include, at a minimum:

(a) Existing development name and location (address and hydrologic subarea);

(b) Inspection and re-inspection date(s);

(c) Weather conditions during inspection;

(d) Description and photo documentation of problems observed with BMPs and indication of need for BMP addition/repair/replacement and any scheduled re-inspection, and date of re-inspection;

(e) Description of actions to reduce pollutants in storm water runoff to the MEP and actions to effectively prohibit non-storm discharges into the MS4 at the inventoried existing development;

(f) Photo documentation of observed actions or BMPs to reduce pollutants in storm water runoff to the MEP and actions to effectively prohibit non-storm discharges into the storm drain;

(g) If the facility, area, and/or activity has been designated or identified as a contributor to the highest water quality priorities identified in the Water Quality Improvement Plan, then the inspection report must include a description of any specific or additional actions taken to reduce or eliminate the contribution of the facility, area, and/or activity to the highest water quality priorities;

(h) Descriptions of any other specific inspection comments which must, at a minimum, include rationales for longer compliance time;

(i) Description of enforcement actions issued in accordance with the Enforcement Response Plan pursuant to Provision E.6; and

(j) Resolution of problems noted and date problems fixed.

e. EXISTING DEVELOPMENT ENFORCEMENT

Each Copermittee must enforce its legal authority established pursuant to Provision E.1 for all its inventoried existing development, as necessary, to achieve compliance with the requirements of this Order, in accordance with its Enforcement Response Plan pursuant to Provision E.6.

6. Enforcement Response Plans

Each Copermittee must develop and implement an Enforcement Response Plan as part of its jurisdictional runoff management program document. The Enforcement Response Plan must include the protocols for progressively stricter responses, including timeframes allowed for corrections of problems, and for various field violation scenarios. The Enforcement Response Plan must include, at a minimum, the following requirements:

a. ILLICIT DISCHARGE DETECTION AND ELIMINATION ENFORCEMENT COMPONENT

The Enforcement Response Plan must describe required enforcement actions to eliminate non-storm water discharges and illicit discharges or connections to the Copermittee's MS4.

(1) The Enforcement Response Plan must include a definition of "high level enforcement" for non-storm water discharges and illicit discharges or connections. "High level enforcement" for non-storm water discharges and illicit discharges or connections may be defined differently for construction sites, municipal, commercial, industrial, and residential areas of existing development.

(2) Non-storm water discharges and illicit discharges or connections must be addressed with an escalating series of enforcement actions as follows:

(a) If the non-storm water discharge and illicit discharge or connection is a source of pollutants contributing to the highest water quality priorities identified in the Water Quality Improvement Plan, then high level enforcement actions must be immediately issued, and subsequent high level enforcement actions must continue to escalate, as necessary, to compel the elimination of the discharge or connection as soon as possible; or

(b) If the non-storm water discharge and illicit discharge or connection is not a source of pollutants contributing to the highest water quality priorities identified in the Water Quality Improvement Plan, then escalating enforcement actions must be issued, and enforcement actions must result in the elimination of the discharge or connection as quickly as the Copermittee's available resources allow.

(3) If the Copermittee identifies the source, and the source is a controllable non-storm water discharge (i.e. anthropogenically influenced) or a controllable illicit discharge or connection, then the Copermittee must implement the following:

(a) Immediately enforce its legal authority to eliminate controllable sources of non-storm water and illicit discharges or connections upon identifying the source; and

(b) For controllable sources of non-storm water discharges and illicit discharges or connections that cannot be eliminated immediately upon identification, the discharge or connection must be eliminated in a timely manner with the goal of eliminating the discharge or connection within 10 business days after the source is identified. If more than 10 business days are required to eliminate the discharge or connection, a rationale must be recorded in the electronic database or equivalent tabular system used to track the investigations of non-storm water and illicit discharges and connections.

(4) If the Copermittee identifies the source as a non-storm water discharge to or from the MS4 that is in exceedance of NALs developed pursuant to Provision C.1, and in violation or threatened violation of an existing separate NPDES permit (e.g. the groundwater dewatering NPDES permit), then the Copermittee must report, within three business days, the findings to the San Diego Water Board including all pertinent information regarding the discharger and discharge characteristics.

b. DEVELOPMENT PROJECTS ENFORCEMENT COMPONENT

The Enforcement Response Plan must describe required enforcement actions to compel compliance with the Copermittee's BMP Design Manual requirements for development projects.

(1) The Enforcement Response Plan must include a definition of "high level enforcement" for development projects.

(2) The enforcement process must include appropriate sanctions to compel compliance with requirements of the Copermittee's BMP Design Manual or this Order. Sanctions must include, at a minimum, the following tools or their equivalent:

(a) Non-monetary penalties;

(b) Fines;

(c) Bonding requirements;

(d) Administrative and criminal penalties;

(e) Liens; and

(f) Permit or occupancy denials.

(3) Occupancy must be denied until a development project is in full compliance with the Copermittee's BMP Design Manual requirements. Documentation of full compliance with the Copermittee's BMP Design Manual requirements must be recorded in the electronic database or equivalent tabular system used to track development projects.

(4) Violations or other non-compliance that contribute or potentially contribute to the highest water quality priorities identified in the Water Quality Improvement Plan must be issued high level enforcement actions. High level enforcement actions must continue to escalate, as necessary, to compel compliance as soon as possible.

(5) For violations of permanent BMP maintenance requirements, all violations must be corrected in a timely manner with the goal of correcting them before the next rain event but no longer than 10 business days after the violations are discovered. If more than 10 business days are required for compliance, a rationale must be recorded in the electronic database or equivalent tabular system used to track permanent BMP inspections.

c. CONSTRUCTION / EXISTING DEVELOPMENT ENFORCEMENT COMPONENT

The Enforcement Response Plan must describe required enforcement actions to compel compliance with its permits and applicable local ordinances, and the requirements of this Order, at construction sites and areas of existing development.

(1) The Enforcement Response Plan must include a definition of "high level enforcement" for construction sites and areas of existing development. "High level enforcement" may be defined differently for construction sites, municipal, commercial, industrial, and residential areas of existing development.

(2) The enforcement process must include, at a minimum, appropriate sanctions to compel compliance, such as:

(a) Verbal and written notices of violation;

(b) Cleanup requirements;

(c) Fines;

(d) Bonding requirements;

(e) Administrative and criminal penalties;

(f) Liens;

(g) Stop work orders; and

(h) Permit and occupancy denials.

(3) Violations or other non-compliance that contribute or potentially contribute to the highest water quality priorities identified in the Water Quality Improvement Plan must be issued high level enforcement actions. High level enforcement actions must continue to escalate, as necessary, to compel compliance as soon as possible.

(4) All violations must be corrected in a timely manner with the goal of correcting them before the next rain event but no longer than 10 business days after the violations are discovered. If more than 10 business days are required for compliance, then a rationale must be recorded in the electronic database or equivalent tabular system used to track construction site and existing development inspections.

d. REPORTING OF NON-COMPLIANT SITES

(1) Each Copermittee must notify the San Diego Water Board in writing within 48 hours of issuing high level enforcement (as defined in the Copermittee's Enforcement Response Plan) to an ~~construction~~industrial, commercial, construction, or residential ~~-~~site that poses a significant threat to water quality or poses a threat to the Highest Water Quality Prirorites (as identified in the Water Quality Improvement Plan) as a result of violations or other non-compliance with its permits and applicable local ordinances, and the requirements of this Order.

(2) Each Copermittee must notify the San Diego Water Board in writing within 48 hours of issuing low level enforcement (those enforcement actions not defined as high level in the Copermittee's Enforcement Response Plan) to an industrial, commercial, construction, or residential site that has received at least 5 prior low level enforcement actions within the past 2 years.

~~(2)~~(3) Each Copermittee must notify the San Diego Water Board of non-filers

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under the Industrial General Permit and Construction General Permit by email to Nonfilers_R9@waterboards.ca.gov.

7. Public Education and Participation

a. Each Copermittee must implement a public education program, as appropriate, to promote and encourage management practices, control techniques and systems, design and engineering methods, and behaviors that reduce the discharge of pollutants in storm water to the MEP, prevent controllable non-storm water discharges from entering the MS4, and protect water quality standards in receiving waters. The public education program must include, at a minimum, the following:

(1) Educational activities, public information activities, and other appropriate outreach activities to reduce pollutants associated with the application of pesticides, herbicides and fertilizer in storm water discharges to and from its MS4 to the MEP;

(2) Educational activities, public information activities, and other appropriate outreach activities to facilitate the proper management and disposal of used oil and toxic materials; and

(3) Appropriate education and training measures for construction site operators and other target audiences, as determined by the Copermittee(s).

b. Each Copermittee must incorporate a mechanism for public participation and where necessary intergovernmental coordination in updating, developing, and implementing its jurisdictional runoff management program.

8. Fiscal Analysis

a. Each Copermittee must secure the resources necessary to meet all the requirements of this Order.

b. Each Copermittee must conduct an annual fiscal analysis of the following:

(1) The capital and operation and maintenance expenditures necessary to implement the requirements of this Order;

(2) The staff resources needed and allocated to meet the requirements of this Order, including any development, implementation, and enforcement activities required;

(3) The estimated expenditures for Provisions E.8.b.(1) and E.8.b.(2) during the reporting period, the preceding reporting period, and the next reporting period; and

(4) The source of funds that are proposed to meet the necessary expenditures described in Provisions E.8.b.(1) and E.8.b.(2), including legal restrictions on the use of such funds.

c. Each Copermittee must submit a summary of the annual fiscal analysis with each Annual Report required pursuant to Provision F.3.b.

d. Each Copermittee must provide the documentation used to develop the summary of the annual fiscal analysis upon request by the San Diego Water Board.

F. REPORTING

The purpose of this provision is to determine and document compliance with the requirements set forth in this Order. The goal of this provision is to communicate to the San Diego Water Board and the people of the State of California the implementation status of each jurisdictional runoff management program and compliance with the requirements of this Order. This goal is to be accomplished through the submittal of specific deliverables to the San Diego Water Board by the Copermittees.

1. Water Quality Improvement Plans

The Copermittees for each Watershed Management Area must develop and submit a complete Water Quality Improvement Plan in accordance with the requirements of Provision B, no later than 12 months after the adoption of this Order for a 30 day public review and comment period. The San Diego Water Board will issue a public notice and solicit public comments on the Water Quality Improvement Plan for a minimum of 30 days. Based on the comments received, the San Diego Water Board will determine whether to hold a public hearing or to limit public input to submittal of written comments. If no hearing is held the San Diego Water Board will notify the Copermittees that the Water Quality Improvement Plan has been accepted as complete following its review and determination that the Water Quality Improvement Plan meets the requirements of this Order. Water Quality Improvement Plans must be made available on the Regional Clearinghouse required pursuant to Provision F.4.

2. Updates

a. Jurisdictional Runoff Management Program Document Updates

Each Copermittee must update its jurisdictional runoff management program document to incorporate the requirements of Provision E. The update must be completed no later than 12 months after the adoption of this Order. Updated jurisdictional runoff management program documents must be made available on the Regional Clearinghouse required pursuant to Provision F.4. Subsequent updates may be submitted as part of the Annual Reports, and updated jurisdictional runoff management program documents must be made available on the Regional Clearinghouse.

b. Permanent BMP Sizing Criteria Design Manual Updates

Each Copermittee must update its BMP Design Manual to incorporate the requirements of Provision E.3.d. The update must be completed no later than 12 months after the adoption of this Order. Updated BMP Design Manuals must be made available on the Regional Clearinghouse required pursuant to Provision F.4. Subsequent updates may be submitted as part of the Annual Reports. Updated BMP Design Manuals must be made available on the Regional Clearinghouse.

c. WATER QUALITY IMPROVEMENT PLAN UPDATES

The Copermittees for each Watershed Management Area must submit updates to the Water Quality Improvement Plan as part of the Annual Reports. Updated Water Quality Improvement Plans must be made available on the Regional Clearinghouse required pursuant to Provision F.4.

3. Progress Reporting

a. PROGRESS REPORT PRESENTATIONS

The Copermittees for each Watershed Management Area must appear before the San Diego Water Board, as requested by the San Diego Water Board, to provide progress reports on the implementation of the Water Quality Improvement Plan and jurisdictional runoff management programs.

b. ANNUAL REPORTS

(1) The Copermittees for each Watershed Management Area must submit an Annual Report for each reporting period, which begins July 1 and ends June 30 in the following year, no later than October 31 following the end of the reporting period. The first Annual Report must be prepared for the reporting period beginning from the date the San Diego Water Board determines that the Water Quality Improvement Plan meets the requirements of this Order to June 30 in the following year. Annual Reports must be made available on the Regional Clearinghouse required pursuant to Provision F.4. Each Annual Report must include the following:

(a) The jurisdictional and watershed monitoring data collected pursuant to Provisions D.1 and D.2, summarized and presented in tabular and graphical form;

(b) Progress of the special studies required pursuant to Provisions D.2 and D.3, and the results or findings when a special study, or each phase of a special study, is completed;

(c) The findings from the assessments required pursuant to Provision D.4;

(d) The progress of implementing the Water Quality Improvement Plan, including, but not limited to, the following:

(i) The progress toward achieving the interim and final numeric targets for the highest water quality priorities for the Watershed Management Area,

(ii) The water quality improvement strategies that were implemented and/or no longer implemented by each of the Copermittees during

the reporting period and previous reporting periods, and are planned to be implemented during the next reporting period,

(iii) Previously proposed modifications or updates incorporated into the Water Quality Improvement Plan and/or each Copermittee's jurisdictional runoff management program document and implemented by the Copermittees in the Watershed Management Area, and

(iv) Proposed modifications or updates to the Water Quality Improvement Plan and/or each Copermittee's jurisdictional runoff management program document;

(e) A completed Jurisdictional Runoff Management Program Annual Report Form (Attachment D) for each Copermittee in the Watershed Management Area, certified by a Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative.

(2) Each Copermittee must complete and submit a Jurisdictional Runoff Management Program Annual Report Form (Attachment D) no later than October 31 of each year until the first Annual Report is required to be submitted.

(3) Each Copermittee must provide any data or documentation utilized in developing the Annual Report upon request by the San Diego Water Board. Any monitoring data utilized in developing the Annual Report must be uploaded to the California Environmental Data Exchange Network (CEDEN).[17] Any monitoring and assessment data utilized in developing the Annual Report must be provided on the Regional Clearinghouse required pursuant to Provision F.4.

c. REGIONAL MONITORING AND ASSESSMENT REPORT

(1) The Copermittees must submit a Regional Monitoring and Assessment Report no later than 180 days in advance of the expiration date of this Order. The Regional Monitoring and Assessment Report may be submitted as part of the ROWD required pursuant to Provision F.5.b. The Copermittees must review the jurisdictional and watershed monitoring data, data analyses, and assessments required pursuant to Provision D.4, to assess the following:

(a) The beneficial uses of the receiving waters within the San Diego Region that are protected or must be restored;

[17] Data must be uploaded to CEDEN Southern California Regional Data Center (http://www.sccwrp.org/Data/DataSubmission/SouthernCaliforniaRegionalDataCenter.aspx) using the templates provided on the CEDEN website.

(b) The progress toward restoring impacted beneficial uses in the receiving waters within the San Diego Region; and

(c) Pollutants or conditions of emerging concern that may impact beneficial uses in the receiving waters within the San Diego Region.

(2) The Regional Monitoring and Assessment Report must include recommendations for improving the implementation and assessment of the Water Quality Improvement Plans and jurisdictional runoff management programs.

(3) Each Copermittee must provide any data or documentation utilized in developing the Regional Monitoring and Assessment Report upon request by the San Diego Water Board. Any monitoring and assessment data utilized in developing the Regional Monitoring and Assessment Report must be provided on the Regional Clearinghouse required pursuant to Provision F.4.

4. Regional Clearinghouse

The Copermittees must develop, update, and maintain an internet-based Regional Clearinghouse that can be used to store, disseminate, and share the Copermittees' Water Quality Improvement Plans, Annual Reports, jurisdictional runoff management program documents, monitoring data, special studies, and any other data or information generated by the Copermittees during the implementation of this Order. Monitoring data collected pursuant to Provision D must be uploaded to CEDEN,[18] with links to the uploaded data available on the Regional Clearinghouse. The Regional Clearinghouse may be linked to other internet-based data portals and databases where the original documents and data are stored. The Regional Clearinghouse must be available and accessible to members of the public. The Regional Clearinghouse must be developed and made available to the public no later than 12 months after the adoption of this Order.

5. Report of Waste Discharge

a. The Orange County Copermittees and the Riverside County Copermittees, are required to submit a complete ROWD pursuant to the requirements of their current Orders and are enrolled under this Order upon expiration of their current Orders. Upon expiration of their current Orders, the Copermittees in each county must comply with the requirements of this Order by July 1 after enrollment under this Order, unless early enrollment is granted pursuant to Provision F.6 of this

[18] Data must be uploaded to CEDEN Southern California Regional Data Center (http://www.sccwrp.org/Data/DataSubmission/SouthernCaliforniaRegionalDataCenter.aspx) using the templates provided on the CEDEN website.

Order. The current Orders for the Orange County Copermittees and Riverside County Copermittees are rescinded upon their expiration date except for enforcement purposes.

b. The Copermittees must submit to the San Diego Water Board a complete ROWD as an application for the re-issuance of this NPDES permit. The ROWD must be submitted no later than 180 days in advance of the expiration date of this Order. The ROWD must contain the following minimum information:

(1) Names and addresses of the Copermittees;

(2) Names and titles of the primary contacts of the Copermittees;

(3) Proposed changes to the Copermittees' Water Quality Improvement Plans and the supporting justification;

(4) Proposed changes to the Copermittees' jurisdictional runoff management programs and the supporting justification;

(5) Any other information necessary for the re-issuance of this Order; and

(6) Any other information required by federal regulations for NPDES permit reissuance.

6. Application for Early Enrollment

a. The Orange County Copermittees, collectively, or Riverside County Copermittees, collectively, may apply for early enrollment under this Order by submitting a Report of Waste Discharge Form 200 for each individual Copermittee in the respective county, with a written request for early enrollment under this Order that certifies the following conditions have been met:

(1) A Water Quality Improvement Plan has been developed in accordance with the requirements of Provision B, which can and will be implemented immediately upon enrollment under this Order;

(2) Each Copermittee in the county has updated its jurisdictional runoff management program document to incorporate the requirements of Provision E, which can and will be implemented immediately upon enrollment under this Order; and

(3) Each Copermittee in the county has updated its BMP Design Manual to incorporate the requirements of Provision E.3.d, which can and will be implemented immediately upon enrollment under this Order.

b. The San Diego Water Board will review the application for early enrollment and associated documents for completeness. A Notice of Enrollment (NOE) under this Order will be issued to the Copermittees in the respective county by the San Diego Water Board upon completion of the early enrollment application requirements. The effective enrollment date will be specified in the NOE and the Copermittees in the respective county are authorized to have MS4 discharges pursuant to the requirements of this Order starting on the date specified in the NOE. The existing Order for that county is rescinded upon the effective enrollment date specified in the NOE except for enforcement purposes.

7. Reporting Provisions

Each Copermittee must comply with all the reporting and recordkeeping provisions of the Standard Permit Provisions and General Provisions contained in Attachment B to this Order.

G. PRINCIPAL WATERSHED COPERMITTEE RESPONSIBILITIES

1. The Copermittees within each Watershed Management Area must designate a Principal Watershed Copermittee and notify the San Diego Water Board of the name of the Principal Watershed Copermittee. An individual Copermittee should not be designated a Principal Watershed Copermittee for more than two Watershed Management Areas. The notification may be submitted with the Water Quality Improvement Plan required pursuant to Provision F.1 of this Order.

2. The Principal Watershed Copermittee is responsible for, at a minimum, the following:

a. Serving as liaison between the Copermittees in the Watershed Management Area and the San Diego Water Board on general permit issues, and when necessary and appropriate, representing the Copermittees in the Watershed Management Area before the San Diego Water Board.

b. Facilitating the development of the Water Quality Improvement Plan in accordance with the requirements of Provision B of this Order

c. Coordinating the submittal of the deliverables required by Provisions F.1, F.2, F.3.a, and F.3.b of this Order.

d. Coordinating and developing, with the other Principal Watershed Copermittees, the requirements of Provisions F.3.c, F.4, and F.5.b of this Order.

H. MODIFICATION OF PROGRAMS

1. Modifications of the Order may be initiated by the San Diego Water Board or by the Copermittees. Requests by Copermittees must be made to the San Diego Water Board.

2. Minor modifications to the Order may be made by the San Diego Water Board where the proposed modification complies with all the prohibitions and limitations, and other requirements of this Order.

3. Proposed modifications that are not minor require amendment of this Order in accordance with this Order's rules, policies, and procedures.

I. STANDARD PERMIT PROVISIONS AND GENERAL PROVISIONS

Each Copermittee must comply with all the Standard Permit Provisions and General Provisions contained in Attachment B to this Order.

ADMINISTRATIVE DRAFT

ATTACHMENT A

DISCHARGE PROHIBITIONS

1. Basin Plan Waste Discharge Prohibitions

California Water Code Section 13243 provides that a Regional Water Board, in a water quality control plan, may specify certain conditions or areas where the discharge of waste or certain types of waste is not permitted. The following waste discharge prohibitions in the Water Quality Control Plan for the San Diego Basin (Basin Plan) are applicable to any person, as defined by Section 13050(c) of the California Water Code, who is a citizen, domiciliary, or political agency or entity of California whose activities in California could affect the quality of waters of the state within the boundaries of the San Diego Region.

1. The discharge of waste to waters of the state in a manner causing, or threatening to cause a condition of pollution, contamination or nuisance as defined in California Water Code Section 13050, is prohibited.

2. The discharge of waste to land, except as authorized by waste discharge requirements or the terms described in California Water Code Section 13264 is prohibited.

3. The discharge of pollutants or dredged or fill material to waters of the United States except as authorized by a National Pollutant Discharge Elimination System (NPDES) permit or a dredged or fill material permit (subject to the exemption described in California Water Code Section 13376) is prohibited.

4. Discharges of recycled water to lakes or reservoirs used for municipal water supply or to inland surface water tributaries thereto are prohibited, unless this San Diego Water Board issues a NPDES permit authorizing such a discharge; the proposed discharge has been approved by the State Department of Health Services (DHS) and the operating agency of the impacted reservoir; and the discharger has an approved fail-safe long-term disposal alternative.

5. The discharge of waste to inland surface waters, except in cases where the quality of the discharge complies with applicable receiving water quality objectives, is prohibited. Allowances for dilution may be made at the discretion of the San Diego Water Board. Consideration would include streamflow data, the degree of treatment provided and safety measures to ensure reliability of facility performance. As an example, discharge of secondary effluent would probably be permitted if streamflow provided 100:1 dilution capability.

6. The discharge of waste in a manner causing flow, ponding, or surfacing on lands not owned or under the control of the discharger is prohibited, unless the discharge is authorized by the San Diego Water Board.

7. The dumping, deposition, or discharge of waste directly into waters of the state, or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited unless authorized by the San Diego Water Board.

8. Any discharge to a storm water conveyance system that is not composed entirely of "*storm water*" is prohibited unless authorized by the San Diego Water Board. [The federal regulations, 40 CFR 122.26(b)(13), define storm water as storm water runoff, snow melt runoff, and surface runoff and drainage. 40 CFR 122.26(b)(2) defines an illicit discharge as any discharge to a storm water conveyance system that is not composed entirely of storm water except discharges pursuant to a NPDES permit and discharges resulting from fire fighting activities.] [§122.26 amended at 56 FR 56553, November 5, 1991; 57 FR 11412, April 2, 1992].

9. The unauthorized discharge of treated or untreated sewage to waters of the state or to a storm water conveyance system is prohibited.

10. The discharge of industrial wastes to conventional septic tank/subsurface disposal systems, except as authorized by the terms described in California Water Code Section 13264, is prohibited.

11. The discharge of radioactive wastes amenable to alternative methods of disposal into the waters of the state is prohibited.

12. The discharge of any radiological, chemical, or biological warfare agent into waters of the state is prohibited.

13. The discharge of waste into a natural or excavated site below historic water levels is prohibited unless the discharge is authorized by the San Diego Water Board.

14. The discharge of sand, silt, clay, or other earthen materials from any activity, including land grading and construction, in quantities which cause deleterious bottom deposits, turbidity or discoloration in waters of the state or which unreasonably affect, or threaten to affect, beneficial uses of such waters is prohibited.

15. The discharge of treated or untreated sewage from vessels to Mission Bay, Oceanside Harbor, Dana Point Harbor, or other small boat harbors is prohibited.

16. The discharge of untreated sewage from vessels to San Diego Bay is prohibited.

17. The discharge of treated sewage from vessels to portions of San Diego Bay that are less than 30 feet deep at mean lower low water (MLLW) is prohibited.

18. The discharge of treated sewage from vessels, which do not have a properly functioning US Coast Guard certified Type I or Type II marine sanitation device, to portions of San Diego Bay that are greater than 30 feet deep at mean lower low water (MLLW) is prohibited.

ADMINISTRATIVE DRAFT

2. Attachment B to State Water Board Resolution 2012-001X

Special Protections for Areas of Special Biological Significance, Governing Point Source Discharges of Storm Water and Nonpoint Source Waste Discharges

I. PROVISIONS FOR POINT SOURCE DISCHARGES OF STORM WATER AND NONPOINT SOURCE WASTE DISCHARGES

The following terms, prohibitions, and special conditions (hereafter collectively referred to as special conditions) are established as limitations on point source storm water and nonpoint source discharges. These special conditions provide Special Protections for marine aquatic life and natural water quality in Areas of Special Biological Significance (ASBS), as required for State Water Quality Protection Areas pursuant to California Public Resources Code Sections 36700(f) and 36710(f). These Special Protections are adopted by the State Water Board as part of the California Ocean Plan (Ocean Plan) General Exception.

The special conditions are organized by category of discharge. The State Water Resources Control Board (State Water Board) and Regional Water Quality Control Boards (Regional Water Boards) will determine categories and the means of regulation for those categories [e.g., Point Source Storm Water National Pollutant Discharge Elimination System (NPDES) or Nonpoint Source].

A. PERMITTED POINT SOURCE DISCHARGES OF STORM WATER

1. General Provisions for Permitted Point Source Discharges of Storm Water

   a. Existing storm water discharges into an ASBS are allowed only under the following conditions:

      (1) The discharges are authorized by an NPDES permit issued by the State Water Board or Regional Water Board;

      (2) The discharges comply with all of the applicable terms, prohibitions, and special conditions contained in these Special Protections; and

      (3) The discharges:

         (i) Are essential for flood control or slope stability, including roof, landscape, road, and parking lot drainage;

         (ii) Are designed to prevent soil erosion;

         (iii) Occur only during wet weather;

         (iv) Are composed of only storm water runoff.

   b. Discharges composed of storm water runoff shall not alter natural ocean water quality in an ASBS.

   c. The discharge of trash is prohibited.

d. Only discharges from existing storm water outfalls are allowed. Any proposed or new storm water runoff discharge shall be routed to existing storm water discharge outfalls and shall not result in any new contribution of waste to an ASBS (i.e., no additional pollutant loading). "Existing storm water outfalls" are those that were constructed or under construction prior to January 1, 2005. "New contribution of waste" is defined as any addition of waste beyond what would have occurred as of January 1, 2005. A change to an existing storm water outfall, in terms of re-location or alteration, in order to comply with these special conditions, is allowed and does not constitute a new discharge.

e. Non-storm water discharges are prohibited except as provided below:

(1) The term "non-storm water discharges" means any waste discharges from a municipal separate storm sewer system (MS4) or other NPDES permitted storm drain system to an ASBS that are not composed entirely of storm water.

(2) The following non-storm water discharges are allowed, provided that the discharges are essential for emergency response purposes, structural stability, slope stability or occur naturally:

(i) Discharges associated with emergency fire fighting operations.

(ii) Foundation and footing drains.

(iii) Water from crawl space or basement pumps.

(iv) Hillside dewatering.

(v) Naturally occurring groundwater seepage via a storm drain.

(vi) Non-anthropogenic flows from a naturally occurring stream via a culvert or storm drain, as long as there are no contributions of anthropogenic runoff.

(3) Authorized non-storm water discharges shall not cause or contribute to a violation of the water quality objectives in Chapter II of the Ocean Plan nor alter natural ocean water quality in an ASBS.

2. Compliance Plans for Inclusion in Storm Water Management Plans (SWMP) and Storm Water Pollution Prevention Plans (SWPPP).

The discharger shall specifically address the prohibition of non-storm water runoff and the requirement to maintain natural water quality for storm water discharges to an ASBS in an ASBS Compliance Plan to be included in its SWMP or a SWPPP, as appropriate to permit type. If a statewide permit includes a SWMP, then the discharger shall prepare a stand-alone compliance plan for ASBS discharges . The ASBS Compliance Plan is subject to approval by the Executive Director of the State Water Board (statewide permits) or Executive Officer of the Regional Water Board (for permits issued by Regional Water Boards).

a. The Compliance Plan shall include a map of surface drainage of storm water runoff, showing areas of sheet runoff, prioritize discharges, and describe any structural Best Management Practices (BMPs) already employed and/or BMPs to be employed in the future. Priority discharges are those that pose the greatest water quality threat and which

are identified to require installation of structural BMPs. The map shall also show the storm water conveyances in relation to other features such as service areas, sewage conveyances and treatment facilities, landslides, areas prone to erosion, and waste and hazardous material storage areas, if applicable. The SWMP or SWPPP shall also include a procedure for updating the map and plan when changes are made to the storm water conveyance facilities.

b. The ASBS Compliance Plan shall describe the measures by which all non-authorized non-storm water runoff (e.g., dry weather flows) has been eliminated, how these measures will be maintained over time, and how these measures are monitored and documented.

c. For Municipal Separate Storm Sewer System (MS4s), the ASBS Compliance Plan shall require minimum inspection frequencies as follows:

   (1) The minimum inspection frequency for construction sites shall be weekly during rainy season;

   (2) The minimum inspection frequency for industrial facilities shall be monthly during the rainy season;

   (3) The minimum inspection frequency for commercial facilities (e.g., restaurants) shall be twice during the rainy season; and

   (4) Storm water outfall drains equal to or greater than 18 inches (457 mm) in diameter or width shall be inspected once prior to the beginning of the rainy season and once during the rainy season and maintained to remove trash and other anthropogenic debris.

d. The ASBS Compliance Plan shall address storm water discharges (wet weather flows) and, in particular, describe how pollutant reductions in storm water runoff, that are necessary to comply with these special conditions, will be achieved through BMPs. Structural BMPs need not be installed if the discharger can document to the satisfaction of the State Water Board Executive Director (statewide permits) or Regional Water Board Executive Officer (Regional Water Board permits) that such installation would pose a threat to health or safety. BMPs to control storm water runoff discharges (at the end-of-pipe) during a design storm shall be designed to achieve on average the following target levels:

   (1) Table B Instantaneous Maximum Water Quality Objectives in Chapter II of the Ocean Plan; or

   (2) A 90% reduction in pollutant loading during storm events, for the applicant's total discharges. The baseline for the reduction is the effective date of the Exception. The baseline for these determinations is the effective date of the Exception, and the reductions must be achieved and documented within four (4) years of the effective date.

e. The ASBS Compliance Plan shall address erosion control and the prevention of anthropogenic sedimentation in ASBS. The natural habitat conditions in the ASBS shall not be altered as a result of anthropogenic sedimentation.

f. The ASBS Compliance Plan shall describe the non-structural BMPs currently employed and planned in the future (including those for construction activities), and include an implementation schedule. The ASBS Compliance Plan shall include non-structural BMPs that address public education and outreach. Education and outreach efforts must adequately inform the public that direct discharges of pollutants from private property not entering an MS4 are prohibited. The ASBS Compliance Plan shall also describe the structural BMPs, including any low impact development (LID) measures, currently employed and planned for higher threat discharges and include an implementation schedule. To control storm water runoff discharges (at the end-of-pipe) during a design storm, permittees must first consider using LID practices to infiltrate, use, or evapotranspirate storm water runoff on-site.

g. The BMPs and implementation schedule shall be designed to ensure that natural water quality conditions in the receiving water are achieved and maintained by either reducing flows from impervious surfaces or reducing pollutant loading, or some combination thereof.

h. If the results of the receiving water monitoring described in IV.B. of these special conditions indicate that the storm water runoff is causing or contributing to an alteration of natural ocean water quality in the ASBS, the discharger shall submit a report to the State Water Board and Regional Water Board within 30 days of receiving the results.

   (1) The report shall identify the constituents in storm water runoff that alter natural ocean water quality and the sources of these constituents.

   (2) The report shall describe BMPs that are currently being implemented, BMPs that are identified in the SWMP or SWPPP for future implementation, and any additional BMPs that may be added to the SWMP or SWPPP to address the alteration of natural water quality. The report shall include a new or modified implementation schedule for the BMPs.

   (3) Within 30 days of the approval of the report by the State Water Board Executive Director (statewide permits) or Regional Water Board Executive Officer (Regional Water Board permits), the discharger shall revise its ASBS Compliance Plan to incorporate any new or modified BMPs that have been or will be implemented, the implementation schedule, and any additional monitoring required.

   (4) As long as the discharger has complied with the procedures described above and is implementing the revised SWMP or SWPPP, the discharger does not have to repeat the same procedure for continuing or recurring exceedances of natural ocean water quality conditions due to the same constituent.

   (5) Compliance with this section does not excuse violations of any term, prohibition, or condition contained in these Special Protections.

3. Compliance Schedule

a. On the effective date of the Exception, all non-authorized non-storm water discharges (e.g., dry weather flow) are effectively prohibited.

b. Within one year from the effective date of the Exception, the discharger shall submit a written ASBS Compliance Plan to the State Water Board Executive Director (statewide permits) or Regional Water Board Executive Officer (Regional Water Board permits) that describes its strategy to comply with these special conditions, including the requirement to maintain natural water quality in the affected ASBS. The ASBS Compliance Plan shall include a time schedule to implement appropriate non-structural and structural controls (implementation schedule) to comply with these special conditions for inclusion in the discharger's SWMP or SWPPP, as appropriate to permit type.

c. Within 18 months of the effective date of the Exception, any non-structural controls that are necessary to comply with these special conditions shall be implemented.

d. Within four (4) years of the effective date of the Exception, any structural controls identified in the ASBS Compliance Plan that are necessary to comply with these special conditions shall be operational.

e. Within four (4) years of the effective date of the Exception, all dischargers must comply with the requirement that their discharges into the affected ASBS maintain natural ocean water quality. If the initial results of post-storm receiving water quality testing indicate levels higher than the 85th percentile threshold of reference water quality data and the pre-storm receiving water levels, then the discharger must re-sample the receiving water, pre- and post-storm. If after re-sampling the post-storm levels are still higher than the 85th percentile threshold of reference water quality data, and the pre-storm receiving water levels, for any constituent, then natural ocean water quality is exceeded. See attached Flowchart.

f. The Executive Director of the State Water Board (statewide permits) or Executive Officer of the Regional Water Board (Regional Water Board permits) may only authorize additional time to comply with the special conditions d. and e., above if good cause exists to do so. Good cause means a physical impossibility or lack of funding.

If a discharger claims physical impossibility, it shall notify the Board in writing within thirty (30) days of the date that the discharger first knew of the event or circumstance that caused or would cause it to fail to meet the deadline in d. or e. The notice shall describe the reason for the noncompliance or anticipated noncompliance and specifically refer to this Section of this Exception. It shall describe the anticipated length of time the delay in compliance may persist, the cause or causes of the delay as well as measures to minimize the impact of the delay on water quality, the measures taken or to be taken by the discharger to prevent or minimize the delay, the schedule by which the measures will be implemented, and the anticipated date of compliance. The discharger shall adopt all reasonable measures to avoid and minimize such delays and their impact on water quality.

The discharger may request an extension of time for compliance based on lack of funding. The request for an extension shall require:

(1) for municipalities, a demonstration of significant hardship to discharger ratepayers, by showing the relationship of storm water fees to annual household income for residents within the discharger's jurisdictional area, and the discharger has made timely and complete applications for all available bond and grant funding, and either no bond or grant funding is available, or bond and/or grant funding is inadequate; or

(2) for other governmental agencies, a demonstration and documentation of a good faith effort to acquire funding through that agency's budgetary process.

B. NONPOINT SOURCE DISCHARGES

[NOT INCLUDED]
[PROVISIONS FOR NONPOINT SOURCE DISCHARGES NOT APPLICABLE]

II. ADDITIONAL REQUIREMENTS FOR PARKS AND RECREATION FACILITIES

[NOT INCLUDED]
[ADDITIONAL REQUIREMENTS FOR PARKS AND RECREATION FACILITIES NOT APPLICABLE]

III. ADDITIONAL REQUIREMENTS – WATERFRONT AND MARINE OPERATIONS

[NOT INCLUDED]
[ADDITIONAL REQUIREMENTS FOR WATERFRONT AND MARINE OPERATIONS NOT APPLICABLE]

IV. MONITORING REQUIREMENTS

Monitoring is mandatory for all dischargers to assure compliance with the Ocean Plan. Monitoring requirements include both: (A) core discharge monitoring, and (B) ocean receiving water monitoring. The State and Regional Water Boards must approve sampling site locations and any adjustments to the monitoring programs. All ocean receiving water and reference area monitoring must be comparable with the Water Boards' Surface Water Ambient Monitoring Program (SWAMP).

Safety concerns: Sample locations and sampling periods must be determined considering safety issues. Sampling may be postponed upon notification to the State and Regional Water Boards if hazardous conditions prevail.

Analytical Chemistry Methods: All constituents must be analyzed using the lowest minimum detection limits comparable to the Ocean Plan water quality objectives. For metal analysis, all samples, including storm water effluent, reference samples, and ocean receiving water samples, must be analyzed by the approved analytical method with the lowest minimum detection limits (currently Inductively Coupled Plasma/Mass Spectrometry) described in the Ocean Plan.

A. CORE DISCHARGE MONITORING PROGRAM

1. General sampling requirements for timing and storm size:

   Runoff must be collected during a storm event that is greater than 0.1 inch and generates runoff, and at least 72 hours from the previously measurable storm event. Runoff samples shall be collected when post-storm receiving water is sampled, and analyzed for the same

constituents as receiving water and reference site samples (see section IV B) as described below.

2. Runoff flow measurements

   a. For municipal/industrial storm water outfalls in existence as of December 31, 2007, 18 inches (457mm) or greater in diameter/width (including multiple outfall pipes in combination having a width of 18 inches, runoff flows must be measured or calculated, using a method acceptable to and approved by the State and Regional Water Boards.
   b. This will be reported annually for each precipitation season to the State and Regional Water Boards.

3. Runoff samples – storm events

   a. For outfalls equal to or greater than 18 inches (0.46m) in diameter or width:

      (1) samples of storm water runoff shall be analyzed during the same storm as receiving water samples for oil and grease, total suspended solids, and, within the range of the southern sea otter indicator bacteria or some other measure of fecal contamination, ; and

      (2) samples of storm water runoff shall be analyzed for critical life stage chronic toxicity (one invertebrate or algal species) at least once during each storm season when receiving water is sampled in the ASBS

      (3) If an applicant has no outfall greater than 36 inches, then storm water runoff from the applicant's largest outfall shall be further analyzed during the same storm as receiving water samples for Ocean Plan Table B metals for protection of marine life, Ocean Plan polynuclear aromatic hydrocarbons (PAHs), current use pesticides (pyrethroids and OP pesticides), and nutrients (ammonia, nitrate and phosphates).

   b. For outfalls equal to or greater than 36 inches (0.91m) in diameter or width:

      (1) samples of storm water runoff shall be analyzed during the same storm as receiving water samples for oil and grease, total suspended solids, and, within the range of the southern sea otter indicator bacteria or some other measure of fecal contamination; and

      (2) samples of storm water runoff shall be further analyzed during the same storm as receiving water samples for Ocean Plan Table B metals for protection of marine life, Ocean Plan polynuclear aromatic hydrocarbons (PAHs), current use pesticides (pyrethroids and OP pesticides), and nutrients (ammonia, nitrate and phosphates) and

      (3) samples of storm water runoff shall be analyzed for critical life stage chronic toxicity (one invertebrate or algal species) at least once during each storm season when receiving water is sampled in the ASBS.

   c. For an applicant not participating in a regional monitoring program [see below in Section IV (B)] in addition to (a.) and (b.) above, a minimum of the two largest outfalls or 20 percent of the larger outfalls, whichever is greater, shall be sampled (flow weighted

composite samples) at least three times annually during wet weather (storm event) and analyzed for all Ocean Plan Table A constituents, Table B constituents for marine aquatic life protection (except for toxicity, only chronic toxicity for three species shall be required), DDT, PCBs, Ocean Plan PAHs, OP pesticides, pyrethroids, nitrates, phosphates, and Ocean Plan indicator bacteria. For parties discharging to ASBS in more than one Regional Water Board region, at a minimum, one (the largest) such discharge shall be sampled annually in each Region.

4. The Executive Director of the State Water Board (statewide permits) or Executive Officer of the Regional Water Board (Regional Water Board permits) may reduce or suspend core monitoring once the storm runoff is fully characterized. This determination may be made at any point after the discharge is fully characterized, but is best made after the monitoring results from the first permit cycle are assessed.

B. OCEAN RECEIVING WATER AND REFERENCE AREA MONITORING PROGRAM

In addition to performing the Core Discharge Monitoring Program in Section II.A above, all applicants having authorized discharges must perform ocean receiving water monitoring. In order to fulfill the requirements for monitoring the physical, chemical, and biological characteristics of the ocean receiving waters within their ASBS, dischargers may choose either (1) an individual monitoring program, or (2) participation in a regional integrated monitoring program.

1. Individual Monitoring Program: The requirements listed below are for those dischargers who elect to perform an individual monitoring program to fulfill the requirements for monitoring the physical, chemical, and biological characteristics of the ocean receiving waters within the affected ASBS. In addition to Core Discharge Monitoring, the following additional monitoring requirements shall be met:

    a. Three times annually, during wet weather (storm events), the receiving water at the point of discharge from the outfalls described in section (IV)(A)(3)(c) above shall be sampled and analyzed for Ocean Plan Table A constituents, Table B constituents for marine aquatic life, DDT, PCBs, Ocean Plan PAHs, OP pesticides, pyrethroids, nitrates, phosphates, salinity, chronic toxicity (three species), and Ocean Plan indicator bacteria.

        The sample location for the ocean receiving water shall be in the surf zone at the point of discharges; this must be at the same location where storm water runoff is sampled. Receiving water shall be sampled at approximately the same time prior to (pre-storm) and during (or immediately after) the same storm (post storm). Reference water quality shall also be sampled and analyzed for the same constituents pre-storm and post-storm, during the same storms when receiving water is sampled. Reference stations will be determined by the State Water Board's Division of Water Quality and the applicable Regional Water Board(s).

    b. Sediment sampling shall occur at least three times during every five (5) year period. The subtidal sediment (sand or finer, if present) at the discharge shall be sampled and analyzed for Ocean Plan Table B constituents for marine aquatic life, DDT, PCBs, PAHs, pyrethroids, and OP pesticides. For sediment toxicity testing, only an acute toxicity test using the amphipod Eohaustorius estuarius must be performed.

c. A quantitative survey of intertidal benthic marine life shall be performed at the discharge and at a reference site. The survey shall be performed at least once every five (5) year period. The survey design is subject to approval by the Regional Water Board and the State Water Board's Division of Water Quality. The results of the survey shall be completed and submitted to the State Water Board and Regional Water Board at least six months prior to the end of the permit cycle.

d. Once during each five (5) year period, a bioaccumulation study shall be conducted to determine the concentrations of metals and synthetic organic pollutants at representative discharge sites and at representative reference sites. The study design is subject to approval by the Regional Water Board and the State Water Board's Division of Water Quality. The bioaccumulation study may include California mussels (Mytilus californianus) and/or sand crabs (Emerita analoga or Blepharipoda occidentalis). Based on the study results, the Regional Water Board and the State Water Board's Division of Water Quality, may adjust the study design in subsequent permits, or add or modify additional test organisms (such as shore crabs or fish), or modify the study design appropriate for the area and best available sensitive measures of contaminant exposure.

e. Marine Debris: Representative quantitative observations for trash by type and source shall be performed along the coast of the ASBS within the influence of the discharger's outfalls. The design, including locations and frequency, of the marine debris observations is subject to approval by the Regional Water Board and State Water Board's Division of Water Quality.

f. The monitoring requirements of the Individual Monitoring Program in this section are minimum requirements. After a minimum of one (1) year of continuous water quality monitoring of the discharges and ocean receiving waters, the Executive Director of the State Water Board (statewide permits) or Executive officer of the Regional Water Board (Regional Water Board permits) may require additional monitoring, or adjust, reduce or suspend receiving water and reference station monitoring. This determination may be made at any point after the discharge and receiving water is fully characterized, but is best made after the monitoring results from the first permit cycle are assessed.

2. Regional Integrated Monitoring Program: Dischargers may elect to participate in a regional integrated monitoring program, in lieu of an individual monitoring program, to fulfill the requirements for monitoring the physical, chemical, and biological characteristics of the ocean receiving waters within their ASBS. This regional approach shall characterize natural water quality, pre- and post-storm, in ocean reference areas near the mouths of identified open space watersheds and the effects of the discharges on natural water quality (physical, chemical, and toxicity) in the ASBS receiving waters, and should include benthic marine aquatic life and bioaccumulation components. The design of the ASBS stratum of a regional integrated monitoring program may deviate from the otherwise prescribed individual monitoring approach (in Section IV.B.1) if approved by the State Water Board's Division of Water Quality and the Regional Water Boards.

   a. Ocean reference areas shall be located at the drainages of flowing watersheds with minimal development (in no instance more than 10% development), and shall not be located in CWA Section 303(d) listed waterbodies or have tributaries that are 303(d) listed. Reference areas shall be free of wastewater discharges and anthropogenic non-storm water runoff. A minimum of low threat storm runoff discharges (e.g. stream highway overpasses and campgrounds) may be allowed on a case-by-case basis.

Reference areas shall be located in the same region as the ASBS receiving water monitoring occurs. The reference areas for each Region are subject to approval by the participants in the regional monitoring program and the State Water Board's Division of Water Quality and the applicable Regional Water Board(s). A minimum of three ocean reference water samples must be collected from each station, each from a separate storm. A minimum of one reference location shall be sampled for each ASBS receiving water site sampled per responsible party. For parties discharging to ASBS in more than one Regional Water Board region, at a minimum, one reference station and one receiving water station shall be sampled in each region.

b. ASBS ocean receiving water must be sampled in the surf zone at the location where the runoff makes contact with ocean water (i.e. at "point zero"). Ocean receiving water stations must be representative of worst-case discharge conditions (i.e. co-located at a large drain greater than 36 inches, or if drains greater than 36 inches are not present in the ASBS then the largest drain greater than18 inches.) Ocean receiving water stations are subject to approval by the participants in the regional monitoring program and the State Water Board's Division of Water Quality and the applicable Regional Water Board(s). A minimum of three ocean receiving water samples must be collected during each storm season from each station, each from a separate storm. A minimum of one receiving water location shall be sampled in each ASBS per responsible party in that ASBS. For parties discharging to ASBS in more than one Regional Water Board region, at a minimum, one reference station and one receiving water station shall be sampled in each region.

c. Reference and receiving water sampling shall commence during the first full storm season following the adoption of these special conditions, and post-storm samples shall be collected when annual storm water runoff is sampled. Sampling shall occur in a minimum of two storm seasons. For those ASBS dischargers that have already participated in the Southern California Bight 2008 ASBS regional monitoring effort, sampling may be limited to only one storm season.

d. Receiving water and reference samples shall be analyzed for the same constituents as storm water runoff samples. At a minimum, constituents to be sampled and analyzed in reference and discharge receiving waters must include oil and grease, total suspended solids, Ocean Plan Table B metals for protection of marine life, Ocean Plan PAHs, pyrethroids, OP pesticides, ammonia, nitrate, phosphates, and critical life stage chronic toxicity for three species. In addition, within the range of the southern sea otter, indicator bacteria or some other measure of fecal contamination shall be analyzed.

3. Waterfront and Marine Operations: In addition to the above requirements for ocean receiving water monitoring, additional monitoring must be performed for marinas and boat launch and pier facilities:

a. For all marina or mooring field operators, in mooring fields with 10 or more occupied moorings, the ocean receiving water must be sampled for Ocean Plan indicator bacteria, residual chlorine, copper, zinc, grease and oil, methylene blue active substances (MBAS), and ammonia nitrogen.

(1) For mooring field operators opting for an individual monitoring program (Section IV.B.1 above), this sampling must occur weekly (on the weekend) from May through October.

(2) For mooring field operators opting to participate in a regional integrated monitoring program (Section IV.B.2 above), this sampling must occur monthly from May through October on a high use weekend in each month. The Water Boards may allow a reduction in the frequency of sampling, through the regional monitoring program, after the first year of monitoring.

b. For all mooring field operators, the subtidal sediment (sand or finer, if present) within mooring fields and below piers shall be sampled and analyzed for Ocean Plan Table B metals (for marine aquatic life beneficial use), acute toxicity, PAHs, and tributyltin. For sediment toxicity testing, only an acute toxicity test using the amphipod Eohaustorius estuarius must be performed. This sampling shall occur at least three times during a five (5) year period. For mooring field operators opting to participate in a regional integrated monitoring program, the Water Boards may allow a reduction in the frequency of sampling after the first sampling effort's results are assessed.

ADMINISTRATIVE DRAFT

ATTACHMENT B

STANDARD PERMIT PROVISIONS AND GENERAL PROVISIONS

1. Standard Permit Provisions

Code of Federal Regulations Title 40 Section 122.41 (40 CFR 122.41) includes conditions, or provisions, that apply to all National Pollutant Discharge Elimination System (NPDES) permits. Additional provisions applicable to NPDES permits are in 40 CFR 122.42. All applicable provisions in 40 CFR 122.41 and 40 CFR 122.42 must be incorporated into this Order and NPDES permit. The applicable 40 CFR 122.41 and 40 CFR 122.42 provisions are as follows:

a. DUTY TO COMPLY [40 CFR 122.41(a)]

The Copermittee must comply with all of the provisions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

(1) The Copermittee 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 or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement. [40 CFR 122.41(a)(1)]

(2) 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 Section 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 Section 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 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 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 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 more than $100,000 per day of violation, or imprisonment of not more than 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 122.41(a)(2)]

(3) Any person may be assessed an administrative penalty by the San Diego Regional Water Quality Control Board (San Diego Water Board), State Water Resources Control Board (State Water Board), or United States Environmental Protection Agency (USEPA) 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 this Act. 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 122.41(a)(3)]

b. DUTY TO REAPPLY [40 CFR 122.41(b)]

If a Copermittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Copermittee must apply for and obtain a new permit.

c. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE [40 CFR 122.41(c)]

It shall not be a defense for a Copermittee 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 permit.

d. DUTY TO MITIGATE [40 CFR 122.41(d)]

The Copermittee must take all reasonable steps to minimize or prevent any discharge or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

e. PROPER OPERATION AND MAINTENANCE [40 CFR 122.41(e)]

The Copermittee must 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 Copermittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a Copermittee only when the operation is necessary to achieve compliance with the conditions of this permit.

f. PERMIT ACTIONS [40 CFR 122.41(f)]

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Copermittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

g. PROPERTY RIGHTS [40 CFR 122.41(g)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

h. DUTY TO PROVIDE INFORMATION [40 CFR 122.41(h)]

The Copermittee must furnish to the San Diego Water Board, State Water Board, or USEPA within a reasonable time, any information which the San Diego Water Board, State Water Board, or USPEA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Copermittee must also furnish to the San Diego Water Board, State Water Board, or USPEA upon request, copies of records required to be kept by this permit.

i. INSPECTION AND ENTRY [40 CFR 122.41(i)]

The Copermittee must allow the San Diego Water Board, State Water Board, USEPA, and/or their authorized representative (including an authorized contractor acting as their representative), upon presentation of credentials and other documents as may be required by law, to:

(1) Enter upon the Copermittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit; [40 CFR 122.41(i)(1)]

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit; [40 CFR 122.41(i)(2)]

(3) Inspect and photograph at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; [40 CFR 122.41(i)(3)] and

(4) Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location. [40 CFR 122.41(i)(4)]

j. MONITORING AND RECORDS [40 CFR 122.41(j)]

(1) Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity. [40 CFR 122.41(j)(1)]

(2) Except for records of monitoring information required by this permit related to the Copermittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five (5) years (or longer as required by 40 CFR Part 503), the

Copermittee must 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 permit, and records of all data used to complete the application for this permit, 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 San Diego Water Board at any time. [40 CFR 122.41(j)(2)]

(3) Records for monitoring information must include: [40 CFR 122.41(j)(3)]

(a) The date, exact place, and time of sampling or measurements; [40 CFR 122.41(j)(3)(i)]
(b) The individual(s) who performed the sampling or measurements; [40 CFR 122.41(j)(3)(ii)]
(c) The date(s) analyses were performed; [40 CFR 122.41(j)(3)(iii)]
(d) The individual(s) who performed the analyses; [40 CFR 122.41(j)(3)(iv)]
(e) The analytical techniques or methods used; [40 CFR 122.41(j)(3)(v)] and
(f) The results of such analyses. [40 CFR 122.41(j)(3)(vi)]

(4) Monitoring must be conducted according to test procedures under 40 CFR Part 136 unless another method is required under 40 CFR Subchapters N or O. [40 CFR 122.41(j)(4)]

In the case of pollutants for which there are no approved methods under 40 CFR Part 136 or otherwise required under 40 CFR Subchapters N and O, monitoring must be conducted according to a test procedure specified in the permit for such pollutants. [40 CFR 122.44(i)(1)(iv)]

(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 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 122.41(j)(5)]

k. SIGNATORY REQUIREMENT [40 CFR 122.41(k)]

(1) All applications, reports, or information submitted to the San Diego Water Board, State Water Board, or USEPA must be signed and certified. (See 40 CFR 122.22) [40 CFR 122.41(k)(1)]

(a) *For a municipality, State, Federal, or other public agency.* [All applications must be signed] [b]y either a principal executive officer or ranking elected official. [40 CFR 122.22(a)(3)]

(b) All reports required by permits, and other information requested by the San Diego Water Board, State Water Board, or USEPA must be signed by a person described in paragraph (a) of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if: [40 CFR 122.22(b)]

(i) The authorization is made in writing by a person described in paragraph (a) of this section; [40 CFR 122.22(b)(1)]

(ii) 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 122.22(b)(2)] and,

(iii) The written authorization is submitted to the San Diego Water Board and State Water Board. [40 CFR 122.22(b)(3)]

(c) *Changes to authorization.* If an authorization under paragraph (b) of this section 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 paragraph (b) of this section must be submitted to the San Diego Water Board prior to or together with any reports, information, or applications to be signed by an authorized representative. [40 CFR 122.22(c)]

(d) *Certification.* Any person signing a document under paragraph (a) or (b) of this section 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 122.22(d)]

(2) 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 permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both. [40 CFR 122.41(k)(2)]

I. REPORTING REQUIREMENTS [40 CFR 122.41(l)]

(1) *Planned changes.* The Copermittee must give notice to the San Diego Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when: [40 CFR 122.41(l)(1)]

(a) 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 122.29(b); [40 CFR 122.41(l)(1)(i)] or

(b) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which

are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1). [40 CFR 122.41(l)(1)(ii)]

(c) The alteration or addition results in a significant change in the Copermittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of 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 122.41(l)(1)(iii)]

(2) *Anticipated noncompliance*. The Copermittee must give advance notice to the San Diego Water Board or State Water Board of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. [40 CFR 122.41(l)(2)]

(3) *Transfers*. This permit is not transferable to any person except after notice to the San Diego Water Board. The San Diego Water Board may require modification or revocation and reissuance of the permit to change the name of the Copermittee and incorporate such other requirements as may be necessary under the CWA. [40 CFR 122.41(l)(3)]

(4) *Monitoring reports.* Monitoring results must be reported at the intervals specified elsewhere in this permit. [40 CFR 122.41(l)(4)]

(a) Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the San Diego Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. [40 CFR 122.41(l)(4)(i)]

(b) If the Copermittee monitors any pollutant more frequently than required by the permit 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 this monitoring must be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the San Diego Water Board or State Water Board. [40 CFR 122.41(l)(4)(ii)]

(c) Calculations for all limitations which require averaging of measurements must utilize an arithmetic mean unless otherwise specified in the permit. [40 CFR 122.41(l)(4)(iii)]

(5) *Compliance schedules*. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date. [40 CFR 122.41(l)(5)]

(6) *Twenty-four hour reporting.*

(a) The Copermittee must report any noncompliance that may endanger health or the environment. Any information must be provided orally within 24 hours from

the time the Copermittee becomes aware of the circumstances. A written submission must also be provided within five (5) days of the time the Copermittee becomes aware of the circumstances. The written submission must 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 122.41(l)(6)(i)]

(b) The following must be included as information which must be reported within 24 hours under this paragraph: [40 CFR 122.41(l)(6)(ii)]

(i) Any unanticipated bypass that exceeds any effluent limitation in the permit (See 40 CFR 122.41(g)). [40 CFR 122.41(l)(6)(ii)(A)]
(ii) Any upset which exceeds any effluent limitation in the permit. [40 CFR 122.41(l)(6)(ii)(B)] and,
(iii) Violation of a maximum daily discharge limitation for any of the pollutants listed by the San Diego Water Board in the permit to be reported within 24 hours. (See 40 CFR 122.44(g)) [40 CFR 122.41(l)(6)(ii)(C)]

(c) The San Diego Water Board may waive the above-required written report on a case-by-case basis if the oral report has been received within 24 hours. [40 CFR 122.41(l)(6)(iii)]

(7) *Other noncompliance.* The Copermittee must report all instances of noncompliance not reported in accordance with the standard provisions required under 40 CFR 122.41(l)(4), (5), and (6), at the time monitoring reports are submitted. The reports must contain the information listed in the standard provisions required under 40 CFR 122.41(l)(6). [40 CFR 122.41(l)(7))]

(8) *Other information.* When the Copermittee 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 San Diego Water Board, State Water Board, or USEPA, the Copermittee must promptly submit such facts or information. [40 CFR 122.41(l)(8)]

m. BYPASS [40 CFR 122.41(m)]

(1) *Definitions.*

(a) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. [40 CFR 122.41(m)(1)(i)] or

(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 which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. [40 CFR 122.41(m)(1)(ii)]

(2) *Bypass not exceeding limitations*. The Copermittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the standard provisions required under 40 CFR 122.41(m)(3) and (4). [40 CFR 122.41(m)(2)]

(3) *Notice.*

(a) *Anticipated bypass*. If the Copermittee knows in advance of the need for a bypass, it must submit a notice, if possible at least ten days before the date of the bypass. [40 CFR 122.41(m)(3)(i)] or

(b) *Unanticipated bypass*. The Copermittee must submit notice of an unanticipated bypass in accordance with the standard provisions required under 40 CFR 122.41(l)(6) (24-hour notice). [40 CFR 122.41(m)(3)(ii)]

(4) *Prohibition of Bypass.*

(a) Bypass is prohibited, and the San Diego Water Board may take enforcement action against a Copermittee for bypass, unless: [40 CFR 122.41(m)(4)(i)]

(i) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; [40 CFR 122.41(m)(4)(i)(A)]
(ii) 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 which occurred during normal periods of equipment downtime or preventive maintenance; [40 CFR 122.41(m)(4)(i)(B)] and,
(iii) The Copermittee submitted notice in accordance with the standard provisions required under 40 CFR 122.41(m)(3). [40 CFR 122.41(m)(4)(i)(C)]

(b) The San Diego Water Board may approve an anticipated bypass, after considering its adverse effects, if the San Diego Water Board determines that it will meet the three conditions listed above. [40 CFR 122.41(m)(4)(ii)]

n. UPSET [40 CFR 122.41(n)]

(1) *Definition.* "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 Copermittee. An upset does not include 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 122.41(n)(1)]

(2) *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 standard provisions required under 40 CFR 122.41(n)(3) 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 122.41(n)(2)]

(3) *Conditions necessary for a demonstration of upset*. A Copermittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that: [40 CFR 122.41(n)(3)]

(a) An upset occurred and that the Copermittee can identify the cause(s) of the upset; [40 CFR 122.41(n)(3)(i)]
(b) The permitted facility was at the time being properly operated; [40 CFR 122.41(n)(3)(ii)] and
(c) The Copermittee submitted notice of the upset in accordance with the standard provisions required under 40 CFR 122.41(l)(6)(ii)(B) (24-hour notice). [40 CFR 122.41(n)(3)(iii)]
(d) The Copermittee complied with any remedial measures pursuant to the standard provisions required under 40 CFR 122.41(d). [40 CFR 122.41(n)(3)(iii)]

(4) *Burden of proof*. In any enforcement proceeding, the Copermittee seeking to establish the occurrence of an upset has the burden of proof. [40 CFR 122.41(n)(4)]

o. STANDARD PERMIT PROVISIONS FOR MUNICIPAL SEPARATE STORM SEWER SYSTEMS [40 CFR 122.42(c)]

The operator of a large or medium municipal separate storm sewer system or a municipal separate storm sewer that has been designated by the San Diego Water Board or State Water Board under 40 CFR 122.26(a)(1)(v) must submit an annual report by the anniversary of the date of the issuance of the permit for such system. The report must include:

(1) The status of implementing the components of the storm water management program that are established as permit conditions; [40 CFR 122.42(c)(1)]

(2) Proposed changes to the storm water management programs that are established as permit conditions. Such proposed changes must be consistent with 40 CFR 122.26(d)(2)(iii); [40 CFR 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 122.26(d)(2)(iv) and (v); [40 CFR 122.42(c)(3)]

(4) A summary of data, including monitoring data, that is accumulated throughout the reporting year; [40 CFR 122.42(c)(4)]

(5) Annual expenditures and budget for year following each annual report; [40 CFR 122.42(c)(5)]

(6) A summary describing the number and nature of enforcement actions, inspections, and public education programs; [40 CFR 122.42(c)(6)]

(7) Identification of water quality improvements or degradation. [40 CFR 122.42(c)(7)]

p. STANDARD PERMIT PROVISIONS FOR STORM WATER DISCHARGES [40 CFR 122.42(d)]

The initial permits for discharges composed entirely of storm water issued pursuant to 40 CFR 122.26(e)(7) must 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.

2. General Provisions

In addition to the standard provisions required to be incorporated into the Order and NPDES permit pursuant to 40 CFR 122.41 and 40 CFR 122.42, several other general provisions apply to this Order. The general provisions applicable to this Order and NPDES permit are as follows:

a. DISCHARGE OF WASTE IS A PRIVILEGE

No discharge of waste into the waters of the State, whether or not such discharge is made pursuant to waste discharge requirements, shall create a vested right to continue such discharge. All discharges of waste into waters of the State are privileges, not rights. [CWC Section 13263(g)]

b. DURATION OF ORDER AND NPDES PERMIT

(1) *Effective date*. This Order and NPDES permit becomes effective on the date of its adoption provided the USEPA has no objection. If the USEPA objects to its issuance, this Order shall not become effective until such objection is withdrawn. This Order supersedes Order No. R9-2007-0001 upon the effective date of this Order, and supercedes Order Nos. R9-2009-0002 and R9-2010-0016 upon their expiration.

(2) *Expiration*. This Order and NPDES permit expires five years after adoption. [40 CFR 122.46(a)]

(3) *Continuation of expired order*. After this Order and NPDES permit expires, the terms and conditions of this Order and NPDES permit are automatically continued pending issuance of a new permit if all requirements of the federal NPDES regulations on the continuation of expired permits (40 CFR 122.6) are complied with.

c. AVAILABILITY

A copy of this Order must be kept at a readily accessible location and must be available to on-site personnel at all times.

d. CONFIDENTIALITY OF INFORMATION

Except as provided for in 40 CFR 122.7, no information or documents submitted in accordance with or in application for this Order will be considered confidential, and all such information and documents shall be available for review by the public at the San Diego Water Board office.

Claims of confidentiality for the following information will be denied: [40 CFR 122.7(b)]

(1) The name and address of any permit applicant or Copermittee; [40 CFR 122.7(b)(1)] and

(2) Permit applications and attachments, permits, and effluent data. [40 CFR 122.7(b)(2)]

e. EFFLUENT LIMITATIONS

(1) *Interim effluent limitations*. The Copermittee must comply with any interim effluent limitations as established by addendum, enforcement action, or revised waste discharge requirements which have been, or may be, adopted by the San Diego Water Board.

(2) *Other effluent limitations and standards*. If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the CWA for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in the permit, the San Diego Water Board shall institute proceedings under these regulations to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition. [40 CFR 122.44(b)(1)]

f. DUTY TO MINIMIZE OR CORRECT ADVERSE IMPACTS

The Copermittee must take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.

g. PERMIT ACTIONS

The filing of a request by the Copermittee for modification, revocation and reissuance, or termination of this Order, or a notification of planned change in or anticipated noncompliance with this Order does not stay any condition of this Order. (See 40 CFR 122.41(f)) In addition, the following provisions apply to this Order:

(1) Upon application by any affected person, or on its own motion, the San Diego Water Board may review and revise the requirements in this Order. All requirements must be reviewed periodically. [CWC Section 13263(e)]

(2) This Order may be terminated or modified for cause, including, but not limited to, all of the following: [CWC Section 13381]

(a) Violation of any condition contained in the requirements of this Order. [CWC Section 13381(a)]

(b) Obtaining the requirements in this Order by misrepresentation, or failure to disclose fully all relevant facts. [CWC Section 13381(b)]

(c) A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge. [CWC Section 13381(c)]

(3) When this Order is transferred to a new owner or operator, such requirements as may be necessary under the CWC may be incorporated into this Order.

h. NPDES PERMITTED NON-STORM WATER DISCHARGES

The San Diego Water Board has, in prior years, issued a limited number of individual NPDES permits for non-storm water discharges to MS4s. The San Diego Water Board or State Water Board may in the future, upon prior notice to the Copermittee(s), issue an NPDES permit for any non-storm water discharge (or class of non-storm water discharges) to an MS4.

i. MONITORING

In addition to the standard provisions required under 40 CFR 122.41(j) and (l)(4), the following general monitoring provisions apply to this Order:

(1) Where procedures are not otherwise specified in Order, sampling, analysis and quality assurance/quality control must be conducted in accordance with the Quality Assurance Management Plan (QAMP) for the State of California's Surface Water Ambient Monitoring Program (SWAMP), adopted by the State Water Resources Control Board (State Water Board).

(2) Pursuant to 40 CFR 122.41(j)(2) and CWC Section 13383(a), each Copermittee must 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 permit, and records of all data used to complete the application for this permit, for a period of at least five (5) years from the date of the sample, measurement, report or application. This period may be extended by request of the San Diego Water Board at any time.

(3) All chemical, bacteriological, and toxicity analyses must be conducted at a laboratory certified for such analyses by the California Department of Public Health or a laboratory approved by the San Diego Water Board.

(4) For priority toxic pollutants that are identified in the California Toxics Rule (CTR) (65 Fed. Reg. 31682), the Copermittees must instruct their laboratories to establish calibration standards that are equivalent to or lower than the Minimum Levels (MLs) published in Appendix 4 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP). If a Copermittee 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 Copermittee must submit documentation from the laboratory to the San Diego Water Board for approval prior to raising the ML for any priority toxic pollutant.

j. ENFORCEMENT

(1) The San Diego Water Board is authorized to enforce the terms of this Order under several provisions of the CWC, including, but not limited to, CWC Sections 13385, 13386, and 13387.

(2) Nothing in this Order shall be construed to protect the Copermittee from its liabilities under federal, state, or local laws.

(3) The CWC provides for civil and criminal penalties comparable to, and in some cases greater than, those provided for under the CWA.

(4) Except as provided in the standard conditions required under 40 CFR 122.41(m) and (n), nothing in this Order shall be construed to relieve the Copermittee from civil or criminal penalties for noncompliance.

(5) Nothing in this Order shall be construed to preclude the institution of any legal action or relieve the Copermittee from any responsibilities, liabilities, or penalties to which the Copermittee is or may be subject to under Section 311 of the CWA.

(6) Nothing in this Order shall be construed to preclude institution of any legal action or relieve the Copermittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authoring preserved by Section 510 of the CWA.

k. SEVERABILITY

The provisions of this Order are severable, and if any provision of this Order, or the application of any provisions 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 thereby.

l. APPLICATIONS

Any application submitted by a Copermittee for reissuance or modification of this Order must satisfy all applicable requirements specified in federal regulations as well as any additional requirements for submittal of a Report of Waste Discharge specified in the CWC and the California Code of Regulations.

m. IMPLEMENTATION

All plans, reports and subsequent amendments submitted in compliance with this Order must be implemented immediately (or as otherwise specified). All submittals by Copermittees must be adequate to implement the requirements of this Order.

n. REPORT SUBMITTALS

(1) All report submittals must include an executive summary, introduction, conclusion, recommendations, and signed certified statement.

(2) Each Copermittee must submit a signed certified statement covering its responsibilities for each applicable submittal.

(3) The Principal Watershed Copermittee(s) must submit a signed certified statement covering its responsibilities for each applicable submittal and the sections of the submittals for which it is responsible.

(4) Unless otherwise directed, the Copermittees must submit one hard copy and one electronic copy of each report required under this Order to the San Diego Water Board, and one electronic copy to the USEPA.

(5) The Copermittees must submit reports and provide notifications as required by this Order to the following:

EXECUTIVE OFFICER
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION
9174 SKY PARK COURT, SUITE 100
SAN DIEGO CA 92123-4340
Telephone: (858) 467-2952 Fax: (858) 571-6972

EUGENE BROMLEY
US ENVIRONMENTAL PROTECTION AGENCY
REGION IX
PERMITS ISSUANCE SECTION (W-5-1)
75 HAWTHORNE STREET
SAN FRANCISCO CA 94105

ADMINISTRATIVE DRAFT

ATTACHMENT C

ACRONYMS AND ABBREVIATIONS

AMAL	Average Monthly Action Level
ASBS	Area(s) of Special Biological Significance
BMP	Best Management Practice
BMP Design Manual	Permanent BMP Sizing Criteria Design Manual
Basin Plan	Water Quality Control Plan for the San Diego Basin
CEQA	California Environmental Quality Act
CCR	California Code of Regulations
CFR	Code of Federal Regulations
CWA	Clean Water Act
CWC	California Water Code
CZARA	Coastal Zone Act Reauthorization Amendments of 1990
ERP	Enforcement Response Plan
ESAs	Environmentally Sensitive Areas
GIS	Geographic Information System
IBI	Index of Biotic Integrity
LID	Low Impact Development
MDAL	Maximum Daily Action Level
MEP	Maximum Extent Practicable
ML	Minimum Level
MS4	Municipal Separate Storm Sewer System
NAL	Non-Storm Water Action Level
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
ROWD	Report of Waste Discharge (application for NPDES reissuance)
SAL	Storm Water Action Level
San Diego Water Board	California Regional Water Quality Control Board, San Diego Region
SIC	Standard Industrial Classification Code
State Water Board	State Water Resources Control Board
TMDL	Total Maximum Daily Load
USEPA	United States Environmental Protection Agency
WDID	Waste Discharge Identification Number
WLA	Waste Load Allocation
WQBEL	Water Quality Based Effluent Limitation

ADMINISTRATIVE DRAFT

DEFINITIONS

Active/Passive Sediment Treatment - Using mechanical, electrical or chemical means to flocculate or coagulate suspended sediment for removal from runoff from construction sites prior to discharge.

Anthropogenic Litter – Trash generated from human activities, not including sediment.

Average Monthly Action Level – 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.

Beneficial Uses - The uses of water necessary for the survival or well being of man, plants, and wildlife. These uses of water serve to promote tangible and intangible economic, social, and environmental goals. "Beneficial Uses" of the waters of the State that may be protected include, but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. Existing beneficial uses are uses that were attained in the surface or ground water on or after November 28, 1975; and potential beneficial uses are uses that would probably develop in future years through the implementation of various control measures. "Beneficial Uses" are equivalent to "Designated Uses" under federal law. [California Water Code Section 13050(f)].

Best Management Practices (BMPs) - Defined in 40 CFR 122.2 as schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. In the case of municipal storm water permits, BMPs may be used in place of numeric effluent limits.

Bioassessment - The use of biological community information to evaluate the biological integrity of a water body and its watershed. With respect to aquatic ecosystems, bioassessment is the collection and analysis of samples of the benthic macroinvertebrate community together with physical/habitat quality measurements associated with the sampling site and the watershed to evaluate the biological condition (i.e. biotic integrity) of a water body.

Biocriteria - Under the CWA, numerical values or narrative expressions that define a desired biological condition for a water body that are legally enforceable. The USEPA defines biocriteria as: "numerical values or narrative expressions that describe the reference biological integrity of aquatic communities inhabiting waters of a given designated aquatic life use… (that)…describe the characteristics of water body segments least impaired by human activities."

Biofiltration - Practices that use vegetation and amended soils to detain and treat runoff from impervious areas. Treatment is through filtration, infiltration, adsorption, ion exchange, and biological uptake of pollutants.

Biological Integrity - Defined in Karr J.R. and D.R. Dudley. 1981. Ecological perspective on water quality goals. *Environmental Management* 5:55-68 as: "A balanced, integrated, adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of natural habitat of the region." Also referred to as ecosystem health.

Clean Water Act Section 303(d) Water Body - An impaired water body in which water quality does not meet applicable water quality standards and/or is not expected to meet water quality standards, even after the application of technology based pollution controls required by the CWA. The discharge of runoff to these water bodies by the Copermittees is significant because these discharges can cause or contribute to violations of applicable water quality standards.

Construction Site – Any project, including projects requiring coverage under the Construction General Permit, that involves soil disturbing activities including, but not limited to, clearing, grading, disturbances to ground such as stockpiling, and excavation.

Contamination - As defined in the Porter-Cologne Water Quality Control Act, contamination is "an impairment of the quality of waters of the State by waste to a degree which creates a hazard to the public health through poisoning or through the spread of disease. 'Contamination' includes any equivalent effect resulting from the disposal of waste whether or not waters of the State are affected."

Copermittee – An incorporated city within the County of Orange, County of Riverside, or County of San Diego in the San Diego Region, the County of Orange, the County of Riverside, the County of San Diego, the Orange County Flood Control District, the Riverside County Water Conservation and Flood Control District, the San Diego Regional Airport Authority, or the Unified Port District of San Diego.

Copermittees – All of the individual Copermittees, collectively.

Critical Channel Flow (Qc) – The channel flow that produces the critical shear stress that initiates bed movement or that erodes the toe of channel banks. When measuring Qc, it should be based on the weakest boundary material – either bed or bank.

Daily Discharge – Defined as either: (1) the total mass of the constituent discharged over the calendar day 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 other than a day), or by the arithmetic mean of analytical results from one or more grab samples taken over the course of a day.

Development Projects - Construction, rehabilitation, redevelopment, or reconstruction of any public or private residential project, industrial, commercial, or any other projects.

Dry Season – The period of time from May 1 to September 30 when rainfall is not expected to occur the San Diego.

Dry Weather – Weather is considered dry if the preceding 72 hours has been without precipitation.

Enclosed Bays – Enclosed bays are 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 bay works is less than 75 percent

of the greatest dimension of the enclosed portion of the bay. Enclosed bays do not include inland surface waters or ocean waters.

Erosion – When land is diminished or worn away due to wind, water, or glacial ice. Often the eroded debris (silt or sediment) becomes a pollutant via storm water runoff. Erosion occurs naturally but can be intensified by land clearing activities such as farming, development, road building, and timber harvesting.

Environmentally Sensitive Areas (ESAs) - Areas that include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance by the State Water Board and San Diego Water Board; State Water Quality Protected Areas; water bodies designated with the RARE beneficial use by the State Water Board and San Diego Water Board; areas designated as preserves or their equivalent under the Natural Communities Conservation Program within the Cities and County of Orange; and any other equivalent environmentally sensitive areas which have been identified by the Copermittees.

Estuaries – Waters, including coastal lagoons, located at the mouth of streams that serve as areas of mixing 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 ocean water. Estuaries do not include inland surface waters or ocean waters.

Existing Development – Any area that has been developed and exists for municipal, commercial, industrial, or residential purposes, uses, or activities. May include areas that are not actively used for its originally developed purpose, but may be re-purposed or redeveloped for another use or activity.

Flow Duration – The long-term period of time that flows occur above a threshold that causes significant sediment transport and may cause excessive erosion damage to creeks and streams (not a single storm event duration). The simplest way to visualize this is to consider a histogram of pre- and post-project flows using long-term records of hourly data. To maintain pre-development flow duration means that the total number of hours (counts) within each range of flows in a flow-duration histogram cannot increase between the pre- and post-development condition. Flow duration within the range of geomorphologically significant flows is important for managing erosion.

Grading - The cutting and/or filling of the land surface to a desired slope or elevation.

Hazardous Material – Any substance that poses a threat to human health or the environment due to its toxicity, corrosiveness, ignitability, explosive nature or chemical reactivity. These also include materials named by the USEPA in 40 CFR 116 to be reported if a designated quantity of the material is spilled into the waters of the U.S. or emitted into the environment.

Hazardous Waste - Hazardous waste is defined as “any waste which, under Section 600 of Title 22 of this code, is required to be managed according to Chapter 30 of Division 4.5 of Title 22 of this code” [CCR Title 22, Division 4.5, Chapter 11, Article 1].

Household Hazardous Waste – Paints, cleaning products, and other wastes generated during home improvement or maintenance activities.

Hydromodification – The change in the natural watershed hydrologic processes and runoff characteristics (i.e., interception, infiltration, overland flow, interflow and groundwater flow) caused by urbanization or other land use changes that result in increased stream flows and sediment transport. In addition, alteration of stream and river channels, such as stream channelization, concrete lining, installation of dams and water impoundments, and excessive streambank and shoreline erosion are also considered hydromodification, due to their disruption of natural watershed hydrologic processes.

Illicit Connection – Any connection to the MS4 that conveys an illicit discharge.

Illicit Discharge - Any discharge to the MS4 that is not composed entirely of storm water except discharges pursuant to a NPDES permit and discharges resulting from fire fighting activities [40 CFR 122.26(b)(2)].

Inactive Areas – Areas of construction activity that are not active and those that have been active and are not scheduled to be re-disturbed for at least 14 days.

Infiltration – Water other than wastewater that enters a sewer system (including sewer service connections and 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 [40 CFR 35.2005(20)].

Inland Surface Waters – Includes all surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

Jurisdictional Runoff Management Program Document – A written description of the specific jurisdictional runoff management measures and programs that each Copermittee will implement to comply with this Order and ensure that storm water pollutant discharges in runoff are reduced to the MEP and do not cause or contribute to a violation of water quality standards.

Low Impact Development (LID) – A storm water management and land development strategy that emphasizes conservation and the use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely reflect pre-development hydrologic functions.

Low Impact Development Best Management Practices (LID BMPs) – LID BMPs include schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States through storm water management and land development strategies that emphasize conservation sand the use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely reflect pre-development hydrologic functions. LID BMPs include retention practices that do not allow runoff, such as infiltration, rain water harvesting and reuse, and evapotranspiration. LID BMPs also include flow-through practices such as biofiltration that may have some discharge of storm water following pollutant reduction.

Major Outfall – As defined in the Code of Federal Regulations, a major outfall is a MS4 outfall that discharges from a single pipe with an inside diameter of 36 inches or more or its equivalent (i.e. discharge from a single conveyance other than a circular pipe which is associated with a drainage are of more than 50 acres); or, for MS4s that receive storm water from lands zoned for industrial activity (based on comprehensive zoning plans or equivalent), a MS4 outfall that

discharges from a single pipe with an inside diameter of 12 inches or more or from its equivalent (i.e. discharge from other than a circular pipe associated with a drainage area of 2 acres or more).

Maximum Daily Action Level (MDAL) –The highest allowable daily discharge of a pollutant, over a calendar day (or 24 hour period). For pollutants with action levels expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with action levels 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) – The technology-based standard established by Congress in CWA section 402(p)(3)(B)(iii) for storm water that operators of MS4s must meet. Technology-based standards establish the level of pollutant reductions that dischargers must achieve, typically by treatment or by a combination of source control and treatment control BMPs. MEP generally emphasizes pollution prevention and source control BMPs primarily (as the first line of defense) in combination with treatment methods serving as a backup (additional line of defense). MEP considers economics and is generally, but not necessarily, less stringent than BAT. A definition for MEP is not provided either in the statute or in the regulations. Instead the definition of MEP is dynamic and will be defined by the following process over time: municipalities propose their definition of MEP by way of their runoff management programs. Their total collective and individual activities conducted pursuant to the runoff management programs becomes their proposal for MEP as it applies both to their overall effort, as well as to specific activities (e.g., MEP for street sweeping, or MEP for MS4 maintenance). In the absence of a proposal acceptable to the San Diego Water Board, the San Diego Water Board defines MEP.

In a memo dated February 11, 1993, entitled "Definition of Maximum Extent Practicable," Elizabeth Jennings, Senior Staff Counsel, SWRCB addressed the achievement of the MEP standard as follows:

"*To achieve the MEP standard, municipalities must employ whatever Best Management Practices (BMPs) are technically feasible (i.e., are likely to be effective) and are not cost prohibitive. The major emphasis is on technical feasibility. Reducing pollutants to the MEP means choosing effective BMPs, and rejecting applicable BMPs only where other effective BMPs will serve the same purpose, or the BMPs would not be technically feasible, or the cost would be prohibitive. In selecting BMPs to achieve the MEP standard, the following factors may be useful to consider:*

a. *Effectiveness: Will the BMPs address a pollutant (or pollutant source) of concern?*
b. *Regulatory Compliance: Is the BMP in compliance with storm water regulations as well as other environmental regulations?*
c. *Public Acceptance: Does the BMP have public support?*
d. *Cost: Will the cost of implementing the BMP have a reasonable relationship to the pollution control benefits to be achieved?*
e. *Technical Feasibility: Is the BMP technically feasible considering soils, geography, water resources, etc.?*

The final determination regarding whether a municipality has reduced pollutants to the maximum extent practicable can only be made by the Regional or State Water Boards, and not by the municipal discharger. If a municipality reviews a lengthy menu of BMPs and chooses to select only a few of the least expensive, it is likely that MEP has not been met. On the other hand, if a municipal discharger employs all applicable BMPs except those

where it can show that they are not technically feasible in the locality, or whose cost would exceed any benefit derived, it would have met the standard. Where a choice may be made between two BMPs that should provide generally comparable effectiveness, the discharger may choose the least expensive alternative and exclude the more expensive BMP. However, it would not be acceptable either to reject all BMPs that would address a pollutant source, or to pick a BMP based solely on cost, which would be clearly less effective. In selecting BMPs the municipality must make a serious attempt to comply and practical solutions may not be lightly rejected. In any case, the burden would be on the municipal discharger to show compliance with its permit. After selecting a menu of BMPs, it is the responsibility of the discharger to ensure that all BMPs are implemented."

Monitoring Year – The monitoring year begins annually on July 1st and ends on June 30th.

Municipal Separate Storm Sewer System (MS4) – 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 designated and approved management agency under section 208 of the CWA that discharges to waters of the United States; (ii) Designated or used for collecting or conveying storm water; (iii) Which is not a combined sewer; (iv) Which is not part of the Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.26.

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 Sections 307, 318, 402, and 405 of the CWA.

Non-Storm Water - All discharges to and from a MS4 that do not originate from precipitation events (i.e., all discharges from a MS4 other than storm water). Non-storm water includes illicit discharges and NPDES permitted discharges.

Nuisance - As defined in the Porter-Cologne Water Quality Control Act, a nuisance is "anything which 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 Board's California Ocean Plan.

Order – Unless otherwise specified, refers to this Order, Order No. R9-2012-0011 (NPDES No. CAS0109266)

Permanent BMP Sizing Criteria Design Manual – A plan developed to eliminate, reduce, or mitigate the impacts of runoff from development projects, including Priority Development

Projects.

Person - A person is defined as an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof [40 CFR 122.2].

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 operations, landfill leachate collection systems, 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.

Pollutant - Any agent that may cause or contribute to the degradation of water quality such that a condition of pollution or contamination is created or aggravated.

Pollution - As defined in the Porter-Cologne Water Quality Control Act, pollution is "the alteration of the quality of the waters of the State by waste, to a degree that unreasonably affects the either of the following: 1) The waters for beneficial uses; or 2) Facilities that serve these beneficial uses." Pollution may include contamination.

Pollution Prevention - Pollution prevention is defined as practices and processes that reduce or eliminate the generation of pollutants, in contrast to source control BMPs, treatment control BMPs, or disposal.

Permanent BMPs - A subset of BMPs including structural and non-structural controls which detain, retain, filter, remove, or educate to prevent the release of pollutants to surface waters from development projects in perpetuity, after construction of a project is completed.

Pre-Development Runoff Conditions (Discharge Rates, Durations, Etc.) – Runoff conditions that existed onsite before the existing development was constructed, or exists onsite before planned development activities occur. This definition includes natural watershed hydrology before any human induced land alterations.

Priority Development Projects - New development and redevelopment projects defined under Provision E.3.b of Order No. R9-2012-0011.

Rainy Season (aka Wet Season) – The period of time from October 1 to April 30 when the San Diego Region experiences the most rainfall.

Receiving Waters – Waters of the United States.

Receiving Water Limitations - Waste discharge requirements issued by the San Diego Water Board typically include both: (1) "Effluent Limitations" (or "Discharge Limitations") that specify the technology-based or water-quality-based effluent limitations; and (2) "Receiving Water Limitations" that specify the water quality objectives in the Basin Plan as well as any other limitations necessary to attain those objectives. In summary, the "Receiving Water Limitations" provision is the provision used to implement the requirement of CWA section 301(b)(1)(C) that NPDES permits must include any more stringent limitations necessary to meet water quality standards.

Redevelopment - The creation, addition, and or replacement of impervious surface on an already developed site. Examples include the expansion of a building footprint, road widening,

the addition to or replacement of a structure, and creation or addition of impervious surfaces. Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Redevelopment does not include trenching and resurfacing associated with utility work; resurfacing existing roadways; new sidewalk construction, pedestrian ramps, or bike lane on existing roads; and routine replacement of damaged pavement, such as pothole repair.

Retain –Keep or hold in a particular place, condition, or position without discharge to surface waters.

Runoff - All flows in a storm water conveyance system that consists of the following components: (1) storm water (wet weather flows) and (2) non-storm water including dry weather flows.

San Diego Water Board – As used in this document the term "San Diego Water Board" is synonymous with the term "Regional Board" as defined in Water Code section 13050(b) and is intended to refer to the California Regional Water Quality Control Board for the San Diego Region as specified in Water Code Section 13200.

Sediment - Soil, sand, and minerals washed from land into water. Sediment resulting from anthropogenic sources (i.e. human induced land disturbance activities) is considered a pollutant. This Order regulates only the discharges of sediment from anthropogenic sources and does not regulate naturally occurring sources of sediment. Sediment can destroy fish-nesting areas, clog animal habitats, and cloud waters so that sunlight does not reach aquatic plants.

Shared Treatment Control BMP - BMPs used by multiple developments to infiltrate, filter, or treat the required volume or flow prior to discharge to a receiving water. This could include, for example, a treatment BMP at the end of an enclosed storm drain that collects runoff from several commercial developments.

Source Control BMP – Land use or site planning practices, or structural or nonstructural measures that aim to prevent runoff pollution by reducing the potential for contamination at the source of pollution. Source control BMPs minimize the contact between pollutants and runoff.

State Water Quality Protection Area – A nonterrestrial marine or estuarine area designated to protect marine species or biological communities from an undesirable alteration in natural water quality, including, but not limited to, areas of special biological significance that have been designated by the State Water Board through its water quality control planning process. Areas of special biological significance are a subset of State Water Quality Protection Areas, and require special protection as determined by the State Water Resources Control Board pursuant to the California Ocean Plan adopted and reviewed pursuant to Article 4 (commencing with Section 13160) of Chapter 3 of Division 7 of the California Water Code and pursuant to the Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (California Thermal Plan) adopted by the State Water Board.

Storm Water – Per 40 CFR 122.26(b)(13), means storm water runoff, snowmelt runoff and surface runoff and drainage. Surface runoff and drainage pertains to runoff and drainage resulting from precipitation events.

Total Maximum Daily Load (TMDL) - The maximum amount of a pollutant that can be discharged into a water body from all sources (point and non-point) and still maintain water quality standards. Under CWA section 303(d), TMDLs must be developed for all water bodies that do not meet water quality standards after application of technology-based controls.

Toxicity - Adverse responses of organisms to chemicals or physical agents ranging from mortality to physiological responses such as impaired reproduction or growth anomalies). The water quality objectives for toxicity provided in the Basin Plan, state in part…"All waters shall be free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life….The survival of aquatic life in surface waters subjected to a waste discharge or other controllable water quality factors, shall not be less than that for the same water body in areas unaffected by the waste discharge".

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.

Unpaved Road – Any long, narrow stretch without pavement used for traveling by motor passenger vehicles between two or more points. Unpaved roads are generally constructed of dirt, gravel, aggregate or macadam and may be improved or unimproved.

Waste - As defined in CWC Section 13050(d), "waste includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal."

Article 2 of CCR Title 23, Chapter 15 (Chapter 15) contains a waste classification system that applies to solid and semi-solid waste, which cannot be discharged directly or indirectly to water of the state and which therefore must be discharged to land for treatment, storage, or disposal in accordance with Chapter 15. There are four classifications of waste (listed in order of highest to lowest threat to water quality): hazardous waste, designated waste, non-hazardous solid waste, and inert waste.

Water Quality Objective - Numerical or narrative limits on constituents or characteristics of water designated to protect designated beneficial uses of the water. [California Water Code Section 13050 (h)]. California's water quality objectives are established by the State and Regional Water Boards in the Water Quality Control Plans. Numeric or narrative limits for pollutants or characteristics of water designed to protect the beneficial uses of the water. In other words, a water quality objective is the maximum concentration of a pollutant that can exist in a receiving water and still generally ensure that the beneficial uses of the receiving water remain protected (i.e., not impaired). Since water quality objectives are designed specifically to protect the beneficial uses, when the objectives are violated the beneficial uses are, by definition, no longer protected and become impaired. This is a fundamental concept under the Porter Cologne Act. Equally fundamental is Porter Cologne's definition of pollution. A condition of pollution exists when the water quality needed to support designated beneficial uses has become unreasonably affected or impaired; in other words, when the water quality objectives have been violated. These underlying definitions (regarding beneficial use protection) are the reason why all waste discharge requirements implementing the federal NPDES regulations require compliance with water quality objectives. (Water quality objectives are also called water quality criteria in the CWA.)

Water Quality Standards - Water quality standards, as defined in Clean Water Act section 303(c) consist of the beneficial uses (e.g., swimming, fishing, municipal drinking water supply, etc.,) of a water body and criteria (referred to as water quality objectives in the California Water Code) necessary to protect those uses. Under the Water Code, the water boards establish beneficial uses and water quality objectives in water quality control or basin plans. Together with an anti-degradation policy, these beneficial uses and water quality objectives serve as water quality standards under the Clean Water Act. In Clean Water Act parlance, state beneficial uses are called "designated uses" and state water quality objectives are called "criteria." Throughout this Order, the relevant term is used depending on the statutory scheme.

Waters of the State - Any water, surface or underground, including saline waters within the boundaries of the State [CWC section 13050 (e)]. The definition of the Waters of the State is broader than that for the Waters of the United States in that all water in the State is considered to be a Waters of the State regardless of circumstances or condition. Under this definition, a MS4 is always considered to be a Waters of the State.

Waters of the United States - As defined in the 40 CFR 122.2, the Waters of the U.S. are defined as: "(a) All waters, which 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 seas; and (g) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition. 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 Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the EPA."

Watershed - That geographical area which drains to a specified point on a water course, usually a confluence of streams or rivers (also known as drainage area, catchment, or river basin).

Wet Season (aka Rainy Season) – The period of time from October 1 to April 30 when the San Diego Region experiences the most rainfall.

Wet Weather – Weather is considered wet if there is a storm event of 0.1 inches and greater and the following 72 hours.

ADMINISTRATIVE DRAFT

ATTACHMENT D

JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM
ANNUAL REPORT FORM

JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM
ANNUAL REPORT FORM
FY _____

I. COPERMITTEE INFORMATION				
Copermittee Name:				
Copermittee Primary Contact Name:				
Copermittee Primary Contact Information:				
Address:				
City:	County:	State:	Zip:	
Telephone:	Fax:	Email:		

II. LEGAL AUTHORITY		
Has the Copermittee established adequate legal authority within its jurisdiction to control pollutant discharges into and from its MS4 that complies with Order No. R9-2012-0011?	**YES** ☐ **NO** ☐	
A Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative has certified that the Copermittee obtained and maintains adequate legal authority?	**YES** ☐ **NO** ☐	

III. JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM DOCUMENT UPDATE		
Was an update of the jurisdictional runoff management program document required or recommended by the San Diego Water Board?	**YES** ☐ **NO** ☐	
If YES to the question above, did the Copermittee update its jurisdictional runoff management program document and make it available on the Regional Clearinghouse?	**YES** ☐ **NO** ☐	

IV. ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM		
Has the Copermittee implemented a program to actively detect and eliminate illicit discharges and connections to its MS4 that complies with Order No. R9-2012-0011?	**YES** ☐ **NO** ☐	
Number of non-storm water discharges reported by the public		
Number of non-storm water discharges detected by Copermittee staff or contractors		
Number of non-storm water discharges investigated by the Copermittee		
Number of sources of non-storm water discharges identified		
Number of non-storm water discharges eliminated		
Number of sources of illicit discharges or connections identified		
Number of illicit discharges or connections eliminated		
Number of enforcement actions issued		
Number of high level enforcement actions issued		

V. DEVELOPMENT PLANNING PROGRAM		
Has the Copermittee implemented a development planning program that complies with Order No. R9-2012-0011?	**YES** ☐ **NO** ☐	
Was an update to the Permanent BMP Sizing Criteria Design Manual required or recommended by the San Diego Water Board?	**YES** ☐ **NO** ☐	
If YES to the question above, did the Copermittee update its Permanent BMP Sizing Criteria Design Manual and make it available on the Regional Clearinghouse?	**YES** ☐ **NO** ☐	
Number of proposed development projects in review		
Number of Priority Development Projects in review		
Number of Priority Development Projects approved		
Number of approved Priority Development Projects exempt from any BMP requirements		
Number of approved Priority Development Projects requiring mitigation		
Number of Priority Development Projects granted occupancy		
Number of completed Priority Development Projects in inventory		
Number of high priority Priority Development Project permanent BMP inspections		
Number of Priority Development Project permanent BMP violations		
Number of enforcement actions issued		
Number of high level enforcement actions issued		

JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM
ANNUAL REPORT FORM
FY _____

VI. CONSTRUCTION MANAGEMENT PROGRAM

Has the Copermittee implemented a construction management program that complies with Order No. R9-2012-0011?	YES ☐ NO ☐

Number of construction sites in inventory	
Number of active construction sites in inventory	
Number of inactive construction sites in inventory	
Number of construction sites closed/completed during reporting period	
Number of construction site inspections	
Number of construction site violations	
Number of enforcement actions issued	
Number of high level enforcement actions issued	

VII. EXISTING DEVELOPMENT MANAGEMENT PROGRAM

Has the Copermittee implemented an existing development management program that complies with Order No. R9-2012-0011?	YES ☐ NO ☐

	Municipal	Commercial	Industrial	Residential
Number of existing developments in inventory				
Number of existing development inspections				
Number of follow-up inspections				
Number of existing development violations				
Number of enforcement actions issued				
Number of high level enforcement actions issued				

VIII. PUBLIC EDUCATION AND PARTICIPATION

Has the Copermittee implemented a public education program that complies with Order No. R9-2012-0011?	YES ☐ NO ☐
Has the Copermittee implemented a mechanism for public participation and where necessary intergovernmental coordination that complies with Order No. R9-2012-0011?	YES ☐ NO ☐

IX. FISCAL ANALYSIS

Has the Copermittee attached to this form a summary of its fiscal analysis that complies with Order No. R9-2012-0011?	YES ☐ NO ☐

X. CERTIFICATION

I [☐ Principal Executive Officer ☐ Ranking Elected Official ☐ Duly Authorized Representative] certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature	Date
Print Name	Title
Telephone Number	Email

ADMINISTRATIVE DRAFT

ATTACHMENT E

SPECIFIC PROVISIONS FOR TOTAL MAXIMUM DAILY LOADS APPLICABLE TO ORDER NO. R9-2012-0011

These provisions implement Total Maximum Daily Loads (TMDLs), adopted by the San Diego Water Board and approved by USEPA under Clean Water Act section 303(c), which are applicable to discharges regulated under this Order. The provisions and schedules for implementation of the TMDLs described below must be incorporated into the Water Quality Improvement Plans, required pursuant to Provision B of this Order, for the specified Watershed Management Areas.

1. Total Maximum Daily Load for Diazinon in Chollas Creek Watershed
2. Total Maximum Daily Loads for Dissolved Copper in Shelter Island Yacht Basin
3. Total Maximum Daily Loads for Total Nitrogen and Total Phosphorus in Rainbow Creek Watershed
4. Total Maximum Daily Loads for Dissolved Copper, Lead, and Zinc in Chollas Creek
5. Total Maximum Daily Loads for Indicator Bacteria, Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay
6. Revised Total Maximum Daily Loads for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region (Including Tecolote Creek)

ADMINISTRATIVE DRAFT

1. Total Maximum Daily Load for Diazinon in Chollas Creek Watershed

a. APPLICABILITY

(1) TMDL Basin Plan Amendment: Resolution No. R9-2002-0123

(2) TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	August 14, 2002
State Water Board Approval Date:	July 16, 2003
Office of Administrative Law Approval Date:	September 11, 2003
US EPA Approval Date:	November 3, 2003

(3) TMDL Effective Date: September 11, 2003

(4) Watershed Management Area: San Diego Bay

(5) Water Body: Chollas Creek

(6) Responsible Copermittees: City of La Mesa, City of Lemon Grove, City of San Diego, County of San Diego, Unified Port District of San Diego

b. WATER QUALITY BASED EFFLUENT LIMITATIONS

The WQBELs for Chollas Creek consist of the following:

(1) Receiving Water Limitations

Discharges from the MS4s must not cause or contribute to the violation of the following receiving water limitations by the end of the compliance schedule under Specific Provision 1.c:

Table 1.1
Receiving Water Limitations as Concentrations in Chollas Creek

Constituent	Exposure Duration	Receiving Water Limitation	Averaging Period
Diazinon	Acute	0.08 µg/L	1 hour
	Chronic	0.05 µg/L	4 days

(2) Effluent Limitations

Discharges from the MS4s must not contain concentrations that exceed the following effluent limitations by the end of the compliance schedule under Specific Provision 1.c:

Table 1.2
Effluent Limitations as Concentrations in MS4 Discharges to Chollas Creek

Constituent	Exposure Duration	Effluent Limitation	Averaging Period
Diazinon	Acute	0.072 µg/L	1 hour
	Chronic	0.045 µg/L	4 days

(3) Best Management Practices

The following BMPs for Chollas Creek must be incorporated into the Water Quality Improvement Plan for the San Diego Bay Watershed Management Area and implemented by the Responsible Copermittees:

(a) The Responsible Copermittees must implement BMPs capable of achieving the WQBELs under Specific Provision 1.b for Chollas Creek.

(b) The Responsible Copermittees must implement the Diazinon Toxicity Control Plan and Diazinon Public Outreach/Education Program as described in the report titled, *Technical Report for Total Maximum Daily Load for Diazinon in Chollas Creek Watershed, San Diego County*, dated August 14, 2002, including subsequent modifications, in order to achieve the WQBELs under Specific Provision 1.b.

(c) The Responsible Copermittees should coordinate the BMPs to address this TMDL with Caltrans wherever and whenever possible.

c. COMPLIANCE SCHEDULE

The Responsible Copermittees were required to achieve their WLA by December 31, 2010. The Responsible Copermittees must be in compliance with the WQBELs under Specific Provision 1.b.

d. SPECIFIC MONITORING AND ASSESSMENT REQUIREMENTS

(a) The Responsible Copermittees must implement the monitoring and assessment requirements issued under Investigation Order No. R9-2004-0277, *California Department of Transportation and San Diego Municipal Separate Storm Sewer System Copermittees Responsible for the Discharge of Diazinon into the Chollas Creek Watershed*. The monitoring reports required under Investigation Order No. R9-2004-0277 must be submitted as part of the Annual Reports required under Provision F.3.b of this Order.

(b) The Responsible Copermittees must monitor the effluent of the MS4 outfalls for diazinon within the Chollas Creek watershed, and calculate or estimate the monthly and annual diazinon loads, in accordance with the requirements of Provisions D.1, D.4.a.(1)(b), and D.4.a.(3)(b) of this Order. The monitoring and assessment results must be submitted as part of the Annual Reports required under Provision F.3.b of this Order.

2. Total Maximum Daily Loads for Dissolved Copper in Shelter Island Yacht Basin

a. APPLICABILITY

(1) TMDL Basin Plan Amendment: Resolution No. R9-2005-0019

(2) TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	February 9, 2005
State Water Board Approval Date:	September 22, 2005
Office of Administrative Law Approval Date:	December 2, 2005
US EPA Approval Date:	February 8, 2006

(3) TMDL Effective Date: December 2, 2005

(4) Watershed Management Area: San Diego Bay

(5) Water Body: Shelter Island Yacht Basin

(6) Responsible Copermittee: City of San Diego

b. WATER QUALITY BASED EFFLUENT LIMITATIONS

The WQBELs for Shelter Island Shoreline Park consist of the following:

(1) Receiving Water Limitations

Discharges from the MS4s must not cause or contribute to the violation of the following receiving water limitations by the end of the compliance schedule under Specific Provision 2.c:

Table 2.1
Receiving Water Limitations as Concentrations in Shelter Island Yacht Basin

Constituent	Exposure Duration	Effluent Limitation	Averaging Period
Dissolved Copper	Acute	4.8 µg/L	1 hour
	Chronic	3.1 µg/L	4 days

(2) Effluent Limitations

Discharges from the MS4s must not contain pollutant loads that exceed the following effluent limitations by the end of the compliance schedule under Specific Provision 2.c:

Table 2.2
Effluent Limitations as Annual Loads in MS4 Discharges to Shelter Island Yacht Basin

Constituent	Effluent Limitation
Dissolved Copper	30 kg/yr

(3) Best Management Practices

The Responsible Copermittee must implement BMPs capable of achieving the WQBELs under Specific Provision 2.b for Shelter Island Yacht Basin

c. COMPLIANCE SCHEDULE

The Responsible Copermittee was required to achieve its WLA upon the effective date of the TMDL, December 2, 2005. The Responsible Copermittee must be in compliance with the WQBELs under Specific Provision 2.b.

d. SPECIFIC MONITORING AND ASSESSMENT REQUIREMENTS

The Responsible Copermittee must monitor the effluent of its MS4 outfalls for dissolved copper, and calculate or estimate the monthly and annual dissolved copper loads, in accordance with the requirements of Provisions D.1, D.4.a.(1)(b), and D.4.a.(3)(b) of this Order. The monitoring and assessment results must be submitted as part of the Annual Reports required under Provision F.3.b of this Order.

3. Total Maximum Daily Loads for Total Nitrogen and Total Phosphorus in Rainbow Creek Watershed

a. APPLICABILITY

(1) TMDL Basin Plan Amendment: Resolution No. R9-2005-0036

(2) TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	February 9, 2005
State Water Board Approval Date:	November 16, 2005
Office of Administrative Law Approval Date:	February 1, 2006
US EPA Approval Date:	March 22, 2006

(3) TMDL Effective Date: February 1, 2006

(4) Watershed Management Area: Santa Margarita River

(5) Water Body: Rainbow Creek

(6) Responsible Copermittee: County of San Diego

b. WATER QUALITY BASED EFFLUENT LIMITATIONS

The WQBELs for Rainbow Creek consist of the following

(1) Receiving Water Limitations

Discharges from the MS4s must not cause or contribute to the violation of the following receiving water limitations by the end of the compliance schedule under Specific Provision 3.c.(1):

Table 3.1
Receiving Water Limitations as Concentrations in Rainbow Creek

Constituent	Receiving Water Limitation
Nitrate (as N)	10 mg/L
Total Nitrogen	1 mg/L
Total Phosphorus	0.1 mg/L

(2) Effluent Limitations

(a) Discharges from the MS4s must not contain concentrations that exceed the following effluent limitations by the end of the compliance schedule under Specific Provision 3.c.(1):

Table 3.2
Effluent Limitations as Concentrations in MS4 Discharges to Rainbow Creek

Constituent	Effluent Limitation
Nitrate (as N)	10 mg/L
Total Nitrogen	1 mg/L
Total Phosphorus	0.1 mg/L

(b) Pollutant loads from given land uses discharging to and from the MS4s must not exceed the following effluent limitations by the end of the compliance schedule under Specific Provision 3.c.(1):

Table 3.3
Effluent Limitations as Annual Loads in MS4 Discharges to Rainbow Creek

Land Use	Total N	Total P
Commercial nurseries	116 kg/yr	3 kg/yr
Park	3 kg/yr	0.1 kg/yr
Residential areas	149 kg/yr	12 kg/yr
Urban areas	27 kg/yr	6 kg/yr

Interim effluent limitations expressed as pollutant loads are given in the compliance schedule under Specific Provision 3.0.

(3) Best Management Practices

(a) The Responsible Copermittee must implement BMPs capable of achieving the WQBELs under Specific Provision 3.b for Rainbow Creek.

(b) The Responsible Copermittee should coordinate the BMPs to address this TMDL with Caltrans and other sources wherever and whenever possible.

c. COMPLIANCE SCHEDULE

(1) WLA Compliance Date

The Responsible Copermittee is required to achieve its WLAs, thus must be in compliance with the WQBELs under Specific Provision 3.b, by December 31, 2021.

(2) Interim Compliance Requirements

Table 3.4
Interim Effluent Limitations as Annual Loads in MS4 Discharges from Specific Land Uses to Rainbow Creek

	Total N Interim Effluent Limitations (kg/yr)			Total P Interim Effluent Limitations (kg/yr)		
	Interim Compliance Date			Interim Compliance Date		
Land Use	**2009**	**2013**	**2017**	**2009**	**2013**	**2017**
Commercial nurseries	3909	299	196	20	16	10
Park	5	3	3	0.15	0.10	0.10
Residential areas	507	390	260	99	74	47
Urban areas	40	27	27	9	6	6

d. SPECIFIC MONITORING AND ASSESSMENT REQUIREMENTS

The Responsible Copermittee must implement the Sampling and Analysis Plan for Rainbow Creek Nutrient Reduction TMDL Implementation Water Quality Monitoring, dated January 2010. The results of any monitoring conducted during the reporting period, and assessment of whether the interim and final WQBELs have been achieved must be submitted as part of the Annual Reports required under Provision F.3.b of this Order.

ADMINISTRATIVE DRAFT

4. Total Maximum Daily Loads for Dissolved Copper, Lead, and Zinc in Chollas Creek

a. APPLICABILITY

(1) TMDL Basin Plan Amendment: Resolution No. R9-2007-0043

(2) TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	June 13, 2007
State Water Board Approval Date:	July 15, 2008
Office of Administrative Law Approval Date:	October 22, 2008
US EPA Approval Date:	December 18, 2008

(3) TMDL Effective Date: October 22, 2008

(4) Watershed Management Area: San Diego Bay

(5) Water Body: Chollas Creek

(6) Responsible Copermittees: City of La Mesa, City of Lemon Grove, City of San Diego, County of San Diego, Unified Port District of San Diego

b. WATER QUALITY BASED EFFLUENT LIMITATIONS

The WQBELsfor Chollas Creek consist of the following:

(1) Receiving Water Limitations

Discharges from the MS4s must not cause or contribute to the violation of the following receiving water limitations by the end of the compliance schedule under Specific Provision 4.c.(1):

Table 4.1
Receiving Water Limitations as Concentrations in Chollas Creek

Constituent	Exposure Duration	Effluent Limitation (µg/L)	Averaging Period
Dissolved Copper	Acute	$(0.96) \times e^{[0.9422 \times \ln(\text{hardness}) - 1.700]} \times \text{WER}^*$	1 hour
	Chronic	$(0.96) \times e^{[0.8545 \times \ln(\text{hardness}) - 1.702]} \times \text{WER}^*$	4 days
Dissolved Lead	Acute	$[1.46203 - 0.145712 \times \ln(\text{hardness})] \times e^{[1.273 \times \ln(\text{hardness}) - 1.460]} \times \text{WER}^*$	1 hour
	Chronic	$[1.46203 - 0.145712 \times \ln(\text{hardness})] \times e^{[1.273 \times \ln(\text{hardness}) - 4.705]} \times \text{WER}^*$	4 days
Dissolved Zinc	Acute	$(0.978) \times e^{[0.8473 \times \ln(\text{hardness}) + 0.884]} \times \text{WER}^*$	1 hour
	Chronic	$(0.986) \times e^{[0.8473 \times \ln(\text{hardness}) + 0.884]} \times \text{WER}^*$	4 days

Notes:
* The Water Effect Ratio (WER) is assumed to be 1.0 unless there is a site-specific and chemical-specific WER.

(2) Effluent Limitations

Discharges from the MS4s must not contain pollutant loads that exceed the following effluent limitations by the end of the compliance schedule under Specific Provision 4.c.(1):

Table 4.2
Effluent Limitations as Concentrations in MS4 Discharges to Chollas Creek

Constituent	Exposure Duration	Effluent Limitation (µg/L)	Averaging Period
Dissolved Copper	Acute	$90\% \times (0.96) \times e^{[0.9422 \times \ln(\text{hardness}) - 1.700]} \times \text{WER}^*$	1 hour
	Chronic	$90\% \times (0.96) \times e^{[0.8545 \times \ln(\text{hardness}) - 1.702]} \times \text{WER}^*$	4 days
Dissolved Lead	Acute	$90\% \times [1.46203 - 0.145712 \times \ln(\text{hardness})] \times e^{[1.273 \times \ln(\text{hardness}) - 1.460]} \times \text{WER}^*$	1 hour
	Chronic	$90\% \times [1.46203 - 0.145712 \times \ln(\text{hardness})] \times e^{[1.273 \times \ln(\text{hardness}) - 4.705]} \times \text{WER}^*$	4 days
Dissolved Zinc	Acute	$90\% \times (0.978) \times e^{[0.8473 \times \ln(\text{hardness}) + 0.884]} \times \text{WER}^*$	1 hour
	Chronic	$90\% \times (0.986) \times e^{[0.8473 \times \ln(\text{hardness}) + 0.884]} \times \text{WER}^*$	4 days

Notes:
* The Water Effect Ratio (WER) is assumed to be 1.0 unless there is a site-specific and chemical-specific WER.

(3) Best Management Practices

(a) The Responsible Copermittee must implement BMPs capable of achieving the WQBELs under Specific Provision 4.b for Chollas Creek.

(b) The Responsible Copermittees should coordinate the BMPs to address this TMDL with Caltrans and the U.S. Navy wherever and whenever possible.

c. COMPLIANCE SCHEDULE

(1) WLA Compliance Date

The Responsible Copermittee is required to achieve the WLA, thus must be in compliance with the WQBELs under Specific Provision 4.b, by October 22, 2028.

(2) Interim Compliance Requirements

The Responsible Copermittee must comply with the following interim WQBELs by the interim compliance date:

Table 4.3
Interim Effluent Limitations as Concentrations in MS4 Discharges to Chollas Creek

Interim Compliance Date	Constituent	Exposure Duration	Effluent Limitation (µg/L)	Averaging Period
October 22, 2018	Dissolved Copper	Acute	$1.2 \times 90\% \times (0.96) \times e^{[0.9422 \times \ln(\text{hardness}) - 1.700]} \times \text{WER}^*$	1 hour
		Chronic	$1.2 \times 90\% \times (0.96) \times e^{[0.8545 \times \ln(\text{hardness}) - 1.702]} \times \text{WER}^*$	4 days
	Dissolved Lead	Acute	$1.2 \times 90\% \times [1.46203 - 0.145712 \times \ln(\text{hardness})] \times e^{[1.273 \times \ln(\text{hardness}) - 1.460]} \times \text{WER}^*$	1 hour
		Chronic	$1.2 \times 90\% \times [1.46203 - 0.145712 \times \ln(\text{hardness})] \times e^{[1.273 \times \ln(\text{hardness}) - 4.705]} \times \text{WER}^*$	4 days
	Dissolved Zinc	Acute	$1.2 \times 90\% \times (0.978) \times e^{[0.8473 \times \ln(\text{hardness}) + 0.884]} \times \text{WER}^*$	1 hour
		Chronic	$1.2 \times 90\% \times (0.986) \times e^{[0.8473 \times \ln(\text{hardness}) + 0.884]} \times \text{WER}^*$	4 days

Notes:
* The Water Effect Ratio (WER) is assumed to be 1.0 unless there is a site-specific and chemical-specific WER.

d. Specific Monitoring and Assessment Requirements

(a) The Responsible Copermittees must implement the monitoring and assessment requirements issued under Investigation Order No. R9-2004-0277, *California Department of Transportation and San Diego Municipal Separate Storm Sewer System Copermittees Responsible for the Discharge of Diazinon into the Chollas Creek Watershed*, when it is amended to include monitoring requirements for the Total Maximum Daily Loads for Dissolved Copper, Lead, and Zinc in Chollas Creek. The monitoring reports required under Investigation Order No. R9-2004-0277 must be submitted as part of the Annual Reports required under Provision F.3.b of this Order.

(b) The Responsible Copermittees must monitor the effluent of the MS4 outfalls discharging to Chollas Creek for dissolved copper, lead, and zinc, and calculate or estimate the monthly and annual dissolved copper, lead, and zinc loads, in accordance with the requirements of Provisions D.1, D.4.a.(1)(b), and D.4.a.(3)(b) of this Order. The monitoring and assessment results must be submitted as part of the Annual Reports required under Provision F.3.b of this Order.

5. Total Maximum Daily Loads for Indicator Bacteria, Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay

a. APPLICABILITY

(1) TMDL Basin Plan Amendment: Resolution No. R9-2008-0027

(2) TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	June 11, 2008
State Water Board Approval Date:	June 16, 2009
Office of Administrative Law Approval Date:	September 15, 2009
US EPA Approval Date:	October 26, 2009

(3) TMDL Effective Date: September 15, 2009

(4) Watershed Management Areas: See Table 5.0

(5) Water Bodies: See Table 5.0

(6) Responsible Copermittees: See Table 5.0

Table 5.0
Applicability of Total Maximum Daily Loads for Indicator Bacteria
Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay

Watershed Management Area	Water Body	Segment or Area	Responsible Copermittees
South Orange County	Dana Point Harbor	Baby Beach	-City of Dana Point -County of Orange
San Diego Bay	San Diego Bay	Shelter Island Shoreline Park	-Unified Port of San Diego

b. WATER QUALITY BASED EFFLUENT LIMITATIONS

The WQBELs for segments or areas of the water bodies listed in Table 5.0 consist of the following:

(1) Receiving Water Limitations

(a) Discharges from the MS4s must not cause or contribute to the violation of the following receiving water limitations by the end of the compliance schedules under Specific Provisions 5.c.(1)(a) and 5.c.(2):

Table 5.1
Receiving Water Limitations as Bacteria Densities in the Water Body

	Receiving Water Limitations	
Constituent	Single Sample Maximum[1,2]	30-Day Geometric Mean[2]
Total Coliform	10,000 MPN/100mL	1,000 MPN/100mL
Fecal Coliform	400 MPN/100mL	200 MPN/100mL
Enterococcus	104 MPN/100mL	35 MPN/100mL

Notes:
1. During wet weather days, only the single sample maximum receiving water limitations are required to be achieved.
2. During dry weather days, the single sample maximum and 30-day geometric mean receiving water limitations are required to be achieved.

(b) If the above receiving water limitations are not met in the receiving water, the Responsible Copermittees must demonstrate that the discharges from the MS4s are not causing or contributing to the violation of receiving water limitations. The Copermittee must provide data that demonstrate the discharges from the MS4s are meeting the effluent limitations under Specific Provision 5.b.(2).

(2) Effluent Limitations

Discharges from the MS4s must not contain densities that exceed the following effluent limitations by the end of the compliance schedules under Specific Provisions 5.c.(1)(a) and 5.c.(2) to demonstrate the discharge is not causing or contributing to a violation of receiving water quality standards:

Table 5.2
Effluent Limitations as Bacteria Densities in MS4 Discharges to the Water Body

	Effluent Limitations	
Constituent	Single Sample Maximum[1,2]	30-Day Geometric Mean[2]
Total Coliform	10,000 MPN/100mL	1,000 MPN/100mL
Fecal Coliform	400 MPN/100mL	200 MPN/100mL
Enterococcus	104 MPN/100mL	35 MPN/100mL

Notes:
1. During wet weather days, only the single sample maximum effluent limitations are required to be achieved.
2. During dry weather days, the single sample maximum and 30-day geometric mean effluent limitations are required to be achieved.

Interim effluent limitations expressed as pollutant loads are given in the compliance schedule under Specific Provision 5.c.

(3) Best Management Practices

(a) The Water Quality Improvement Plans for the applicable Watershed Management Areas in Table 5.0 fulfill the Bacteria Load Reduction Plan (BLRP) requirements in Resolution No. R9-2008-0027.

(b) The Responsible Copermittee must implement BMPs capable of achieving the WQBELs under Specific Provision 5.0 for the segments or areas of the water bodies listed in Table 5.0

c. COMPLIANCE SCHEDULE

(1) Baby Beach in Dana Point Harbor

(a) WLA Compliance Dates

The Responsible Copermittees for MS4 discharges to Baby Beach are required to achieve the WLA, thus must be in compliance with the WQBELs under Specific Provision 5.0, according to the following compliance schedule:

Table 5.3
Compliance Schedule Dates to Achieve Baby Beach WLAs

Constituent	Dry Weather WLA Compliance Date	Wet Weather WLA Compliance Date
Total Coliform	September 15, 2014	September 15, 2009
Fecal Coliform		September 15, 2009
Enterococcus		September 15, 2019

(b) Interim Compliance Requirements

The Responsible Copermittees for MS4 discharges to Baby Beach must comply with the following interim WQBELs by the interim compliance date:

Table 5.4
Interim Effluent Limitations as Loads in MS4 Discharges to Baby Beach

Constituent	Interim Compliance Date	Dry Weather Interim Effluent Limitation	Wet Weather Interim Effluent Limitation
Total Coliform	September 15, 2012	~~45~~.~~9332~~x10^9 MPN/day	NA*
Fecal Coliform	September 15, 2012	0.59x10^9 MPN/day	NA*
Enterococcus	September 15, 2012	0.42x10^9 MPN/day	NA**
	September 15, 2016	NA*	207x10^9 MPN/30days

Notes:
* The WQBELs under Specific Provision 5.b must already be achieved by the given interim compliance date.
** There is no corresponding interim WQBEL for the given interim compliance date.

(2) Shelter Island Shoreline Park in San Diego Bay

The Responsible Copermittee for MS4 discharges to Shelter Island Shoreline Park is required to achieve the WLA, thus must be in compliance with the WQBELs under Specific Provision 5.0, by December 31, 2012.

d. SPECIFIC MONITORING AND ASSESSMENT REQUIREMENTS

(1) Monitoring Stations

(a) The Responsible Copermittees must designate the MS4 outfalls within their jurisdiction discharging to the segments or areas of the water bodies listed in Table 5.0 as high priority non-storm water MS4 monitoring stations, in accordance with the requirements of Provision D.1.

(b) The Responsible Copermittees must establish at least one monitoring station within the receiving water body.

(2) Monitoring Procedures

(a) The Responsible Copermittees must monitor the effluent of the designated MS4 outfalls within their jurisdiction discharging during dry weather conditions to the segments or areas of the water bodies listed in Table 5.0 in accordance with the dry weather jurisdictional monitoring requirements of Provision D.1.a.(1)(b). Samples required to be submitted to a laboratory for analysis must include analysis for total coliform, fecal coliform, and *Enterococcus* indicator bacteria.

(b) The Responsible Copermittees must monitor, within the first 24 hours of each storm event,[19] the effluent of the designated MS4 outfalls within their jurisdiction discharging to the segments or areas of the water bodies listed in Table 5.0 in accordance with the wet weather jurisdictional monitoring requirements of Provision D.1.b.(1)(b) of this Order. Samples required to be submitted to a laboratory for analysis must include analysis for total coliform, fecal coliform, and *Enterococcus* indicator bacteria.

(c) The Responsible Copermittees must collect samples from the monitoring stations within the receiving water body for each dry weather and wet weather MS4 outfall monitoring event. Samples must be analyzed for total coliform, fecal coliform, and *Enterococcus* indicator bacteria.

(3) Assessment and Reporting Requirements

(a) The Responsible Copermittees must analyze the dry weather and wet weather monitoring data to assess whether the interim and final WQBELs have been achieved.

(b) The monitoring and assessment results must be submitted as part of the

[19] Wet weather days are defined by the TMDL as storm events of 0.2 inches or greater and the following 72 hours. The Responsible Copermittees may choose to limit their wet weather sampling requirements to storm events of 0.2 inches or greater, or also include storm events of 0.1 inches or greater as defined by the federal regulations [40CFR122.26(d)(2)(iii)(A)(2)].

ADMINISTRATIVE DRAFT

Annual Reports required under Provision F.3.b of this Order.

ADMINISTRATIVE DRAFT

6. Revised Total Maximum Daily Loads for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region (Including Tecolote Creek)

a. APPLICABILITY

(1) TMDL Basin Plan Amendment: Resolution No. R9-2010-0001

(2) TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	February 10, 2010
State Water Board Approval Date:	December 14, 2010
Office of Administrative Law Approval Date:	April 4, 2011
US EPA Approval Date:	June 22, 2011

(3) TMDL Effective Date: April 4, 2011

(4) Watershed Management Areas: See Table 6.0

(5) Water Bodies: See Table 6.0

(6) Responsible Copermittees: See Table 6.0

Table 6.0
Applicability of Total Maximum Daily Loads for Indicator Bacteria
Project I - Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek)

Watershed Management Area	Water Body	Segment or Area	Responsible Copermittees
South Orange County	Pacific Ocean Shoreline	Cameo Cove at Irvine Cove Drive – Riviera Way	-City of Laguna Beach -County of Orange -Orange County Flood Control District
		at Heisler Park - North	
	Pacific Ocean Shoreline	at Main Laguna Beach	-City of Aliso Viejo -City of Laguna Beach -City of Laguna Woods -County of Orange -Orange County Flood Control District
		Laguna Beach at Ocean Avenue	
		Laguna Beach at Cleo Street	
		Arch Cove at Bluebird Canyon Road	
		Laguna Beach at Dumond Drive	
	Pacific Ocean Shoreline	Laguna Beach at Lagunita Place / Blue Lagoon Place at Aliso Beach	-City of Aliso Viejo -City of Laguna Beach -City of Laguna Hills -City of Laguna Niguel -City of Laguna Woods -City of Lake Forest -City of Mission Viejo -County of Orange -Orange County Flood Control District
	Aliso Creek	Entire reach (7.2 miles) and associated tributaries: - Aliso Hills Channel - English Canyon Creek - Dairy Fork Creek - Sulfur Creek - Wood Canyon Creek	
	Aliso Creek Mouth	at mouth	

Table 6.0 (Cont'd)
Applicability of Total Maximum Daily Loads for Indicator Bacteria
Project I - Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek)

Watershed Management Area	Water Body	Segment or Area	Responsible Copermittees
South Orange County (cont'd)	Pacific Ocean Shoreline	Aliso Beach at West Street	-City of Dana Point -City of Laguna Beach -City of Laguna Niguel -County of Orange -Orange County Flood Control District
		Aliso Beach at Table Rock Drive	
		100 Steps Beach at Pacific Coast Hwy at hospital (9th Avenue)	
		at Salt Creek (large outlet)	
		Salt Creek Beach at Salt Creek service road	
		Salt Creek Beach at Strand Road	
	Pacific Ocean Shoreline	at San Juan Creek	-City of Dana Point -City of Laguna Hills -City of Laguna Niguel -City of Mission Viejo -City of Rancho Santa Margarita -City of San Juan Capistrano -County of Orange -Orange County Flood Control District
	San Juan Creek	lower 1 mile	
	San Juan Creek Mouth	at mouth	
	Pacific Ocean Shoreline	at Poche Beach	-City of San Clemente -County of Orange -Orange County Flood Control District
		Ole Hanson Beach Club Beach at Pico Drain	
		San Clemente City Beach at El Portal Street Stairs	
		San Clemente City Beach at Mariposa Street	
		San Clemente City Beach at Linda Lane	
		San Clemente City Beach at South Linda Lane	
		San Clemente City Beach at Lifeguard Headquarters	
		under San Clemente Municipal Pier	
		San Clemente City Beach at Trafalgar Canyon (Trafalgar Lane)	
		San Clemente State Beach at Riviera Beach	
		Can Clemente State Beach at Cypress Shores	
San Luis Rey River	Pacific Ocean Shoreline	at San Luis Rey River mouth	-City of Oceanside -City of Vista -County of San Diego

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Table 6.0 (Cont'd)
Applicability of Total Maximum Daily Loads for Indicator Bacteria
Project I - Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek)

Watershed Management Area	Water Body	Segment or Area	Responsible Copermittees
Carlsbad	Pacific Ocean Shoreline	at Moonlight State Beach	-City of Carlsbad -City of Encinitas -City of Escondido -City of Oceanside -City of San Marcos -City of Solana Beach -City of Vista -County of San Diego
San Dieguito River	Pacific Ocean Shoreline	at San Dieguito Lagoon mouth	-City of Del Mar -City of Escondido -City of Poway -City of San Diego -City of Solana Beach -County of San Diego
Penasquitos	Pacific Ocean Shoreline	Torrey Pines State Beach at Del Mar (Anderson Canyon)	-City of Del Mar -City of Poway -City of San Diego -County of San Diego
		La Jolla Shores Beach at El Paseo Grande	-City of San Diego
		La Jolla Shores Beach at Caminito del Oro	
		La Jolla Shores Beach at Vallecitos	
		La Jolla Shores Beach at Avenida de la Playa	
		at Casa Beach, Children's Pool	
		South Casa Beach at Coast Boulevard	
		Whispering Sands Beach at Ravina Street	
		Windansea Beach at Vista de la Playa	
		Windansea Beach at Bonair Street	
		Windansea Beach at Playa del Norte	
		Windansea Beach at Palomar Avenue	
		at Tourmaline Surf Park	
		Pacific Beach at Grand Avenue	
	Tecolote Creek	Entire reach and tributaries	-City of San Diego

Table 6.0 (Cont'd)
Applicability of Total Maximum Daily Loads for Indicator Bacteria
Project I- Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek)

Watershed Management Area	Water Body	Segment or Area	Responsible Copermittees
San Diego River	Forrester Creek	lower 1 mile	-City of El Cajon -City of La Mesa -City of Santee -County of San Diego
	San Diego River	lower 6 miles	-City of El Cajon -City of La Mesa -City of San Diego -City of Santee -County of San Diego
	Pacific Ocean Shoreline	at San Diego River mouth at Dog Beach	
San Diego Bay	Chollas Creek	lower 1.2 miles	-City of La Mesa -City of Lemon Grove -City of San Diego -County of San Diego

b. WATER QUALITY BASED EFFLUENT LIMITATIONS

The WQBELs for segments or areas of the water bodies listed in Table 6.0 consist of the following:

(1) Receiving Water Limitations

(a) Discharges from the MS4s must not cause or contribute to the violation of the following receiving water limitations by the end of the compliance schedules under Specific Provision 6.c.(1):

Table 6.1
Receiving Water Limitations as Bacteria Densities and Allowable Exceedance Frequencies in the Water Body

	Receiving Water Limitations			
Constituent	Single Sample Maximum[1,2] (MPN/100mL)	Single Sample Maximum Allowable Exceedance Frequency[3]	30-Day Geometric Mean[2] (MPN/100mL)	30-Day Geometric Mean Allowable Exceedance Frequency
Total Coliform	10,000	22% / 0%	1,000	0%
Fecal Coliform	400	22% / 0%	200	0%
Enterococcus	104[4] / 61[5]	22% / 0%	35[4] / 33[5]	0%

Notes:
1. During wet weather days, only the single sample maximum receiving water limitations are required to be achieved.
2. During dry weather days, the single sample maximum and 30-day geometric mean receiving water limitations are required to be achieved.
3. The 22% single sample maximum allowable exceedance frequency only applies to wet weather days. The 0% single sample maximum allowable exceedance frequency applies to dry weather days.
4. This *Enterococcus* receiving water limitation applies to segments of areas of Pacific Ocean Shoreline listed in Table 6.0.
5. This *Enterococcus* receiving water limitations applies to segments or areas of creeks or creek mouths listed in Table 6.0.

Interim receiving water limitations expressed as allowable exceedance frequencies are given in the compliance schedule under Specific Provision 6.c.

(b) If the above receiving water limitations are not met in the receiving water, the Responsible Copermittees must demonstrate that the discharges from the MS4s are not causing or contributing to the violation of receiving water limitations. The Copermittee must provide data that demonstrate the discharges from the MS4s are meeting the effluent limitations under Specific Provision 6.b.(2).

(2) Effluent Limitations

Discharges from the MS4s must not contain densities that exceed the following effluent limitations by the end of the compliance schedules under Specific Provision 6.c.(1) to demonstrate the discharge is not causing or contributing to a violation of receiving water quality standards:

Table 6.2
Effluent Limitations as Bacteria Densities and Allowable Exceedance Frequencies in MS4 Discharges to the Water Body

	Effluent Limitations			
Constituent	Single Sample Maximum[1,2] (MPN/100mL)	Single Sample Maximum Allowable Exceedance Frequency[3]	30-Day Geometric Mean[2] (MPN/100mL)	30-Day Geometric Mean Allowable Exceedance Frequency
Total Coliform	10,000	22% / 0%	1,000	0%
Fecal Coliform	400	22% / 0%	200	0%
Enterococcus	104[4] / 61[5]	22% / 0%	35[4] / 33[5]	0%

Notes:
1. During wet weather days, only the single sample maximum effluent limitations are required to be achieved.
2. During dry weather days, the single sample maximum and 30-day geometric mean effluent limitations are required to be achieved.
3. The 22% single sample maximum allowable exceedance frequency only applies to wet weather days. The 0% single sample maximum allowable exceedance frequency applies to dry weather days
4. This *Enterococcus* effluent limitation applies to MS4 discharges to segments of areas of Pacific Ocean Shoreline listed in Table 6.0.
5. This *Enterococcus* effluent limitation applies to MS4 discharges to segments or areas of creeks or creek mouths listed in Table 6.0.

Interim effluent limitations expressed as allowable exceedance frequencies are given in the compliance schedule under Specific Provision 6.c.

(3) Best Management Practices

(a) The Water Quality Improvement Plans for the applicable Watershed Management Areas in Table 6.0 fulfill the Comprehensive Load Reduction Plan (CLRP) requirements in Resolution No. R9-2010-0001.

(b) The Responsible Copermittee must implement BMPs capable of achieving the WQBELs under Specific Provision 6.b for the segments or areas of the water bodies listed in Table 6.0.

(c) The Responsible Copermittees should coordinate the BMPs to address this TMDL with Caltrans and owners/operators of small MS4s wherever and whenever possible.

c. COMPLIANCE SCHEDULE

(1) WLA Compliance Dates

The Responsible Copermittees for MS4 discharges to a segment or area of the water bodies listed in Table 6.0 are required to achieve the WLA, thus must be in compliance with the WQBELs under Specific Provision 6.b, according to the following compliance schedule:

Table 6.3
Compliance Schedule Dates to Achieve Indicator Bacteria WLAs

Constituent	Dry Weather WLA Compliance Date	Wet Weather WLA Compliance Date
Total Coliform	April 4, 2021	April 4, 2031
Fecal Coliform		
Enterococcus		

(2) Interim Compliance Requirements

The Responsible Copermittees must comply with the following interim WQBELs by the interim compliance dates:

(a) Interim Dry Weather WQBELs

The Responsible Copermittee must calculate the "existing" exceedance frequencies of the 30-day geometric mean water quality objectives for each of the indicator bacteria by analyzing the monitoring data collected between January 1, 2002 and April 4, 2011. "Existing" exceedance frequencies may be calculated by segment or area of a water body, or by water body, and/or by Watershed Management Area listed in Table 6.0. Separate "existing" exceedance frequencies must be calculated for beaches and creeks/creek mouths.

The Responsible Copermittees must achieve a 50 percent reduction in the "existing" exceedance frequency of the 30-day geometric mean WQBELs for the segments or areas of the water bodies listed in Table 6.0 by the interim compliance dates for achieving the interim dry weather WQBELs given in Table 6.5. A 50 percent reduction in the "existing" exceedance frequency is equivalent to half of the "existing" exceedance frequency of the 30-day geometric mean WQBELs.

The "existing" exceedance frequencies and the interim dry weather allowable exceedance frequencies (i.e. interim dry weather WQBELs) calculated by the Responsible Copermittees must be included in the Water Quality Improvement Plans for the applicable Watershed Management Areas.

(b) Interim Wet Weather WQBELs

The Responsible Copermittees must achieve the interim wet weather WQBELs in Table 6.4, expressed as interim allowable exceedance frequencies, by the interim compliance dates for achieving the interim wet weather WQBELs given in Table 6.5.

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Table 6.4

Interim Wet Weather WQBELs Expressed as
Interim Wet Weather Allowable Exceedance Frequencies

Watershed Management Area	Water Body	Segment or Area	Interim Wet Weather Allowable Exceedance Frequencies		
			Total Coliform	Fecal Coliform	*Entero-coccus*
South Orange County	Pacific Ocean Shoreline	Cameo Cove at Irvine Cove Drive – Riviera Way	38%	37%	39%
		at Heisler Park - North			
	Pacific Ocean Shoreline	at Main Laguna Beach			
		Laguna Beach at Ocean Avenue			
		Laguna Beach at Cleo Street			
		Arch Cove at Bluebird Canyon Road			
		Laguna Beach at Dumond Drive			
	Pacific Ocean Shoreline	Laguna Beach at Lagunita Place / Blue Lagoon Place at Aliso Beach	41%	41%	42%
	Aliso Creek	Entire reach (7.2 miles) and associated tributaries: - Aliso Hills Channel - English Canyon Creek - Dairy Fork Creek - Sulfur Creek - Wood Canyon Creek	41%	41%	42%
	Aliso Creek Mouth	at mouth	41%	41%	42%
	Pacific Ocean Shoreline	Aliso Beach at West Street	36%	36%	36%
		Aliso Beach at Table Rock Drive			
		100 Steps Beach at Pacific Coast Hwy at hospital (9th Avenue)			
		at Salt Creek (large outlet)			
		Salt Creek Beach at Salt Creek service road			
		Salt Creek Beach at Strand Road			

Table 6.4 (Cont'd)
Interim Wet Weather WQBELs Expressed as
Interim Wet Weather Allowable Exceedance Frequencies

Watershed Management Area	Water Body	Segment or Area	Interim Wet Weather Allowable Exceedance Frequencies		
			Total Coliform	Fecal Coliform	*Entero-coccus*
South Orange County (cont'd)	Pacific Ocean Shoreline	at San Juan Creek	44%	44%	48%
	San Juan Creek	lower 1 mile	44%	44%	47%
	San Juan Creek Mouth	at mouth	44%	44%	47%
	Pacific Ocean Shoreline	at Poche Beach	35%	35%	36%
		Ole Hanson Beach Club Beach at Pico Drain			
		San Clemente City Beach at El Portal Street Stairs			
		San Clemente City Beach at Mariposa Street			
		San Clemente City Beach at Linda Lane			
		San Clemente City Beach at South Linda Lane			
		San Clemente City Beach at Lifeguard Headquarters			
		under San Clemente Municipal Pier			
		San Clemente City Beach at Trafalgar Canyon (Trafalgar Lane)			
		San Clemente State Beach at Riviera Beach			
		Can Clemente State Beach at Cypress Shores			
San Luis Rey River	Pacific Ocean Shoreline	at San Luis Rey River mouth	45%	44%	47%
Carlsbad	Pacific Ocean Shoreline	at Moonlight State Beach	40%	40%	41%
San Dieguito River	Pacific Ocean Shoreline	at San Dieguito Lagoon mouth	33%	33%	36%

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Table 6.4 (Cont'd)
Interim Wet Weather WQBELs Expressed as
Interim Wet Weather Allowable Exceedance Frequencies

Watershed Management Area	Water Body	Segment or Area	Interim Wet Weather Allowable Exceedance Frequencies		
			Total Coliform	Fecal Coliform	*Entero-coccus*
Penasquitos	Pacific Ocean Shoreline	Torrey Pines State Beach at Del Mar (Anderson Canyon)	26%	26%	26%
		La Jolla Shores Beach at El Paseo Grande	37%	37%	37%
		La Jolla Shores Beach at Caminito del Oro			
		La Jolla Shores Beach at Vallecitos			
		La Jolla Shores Beach at Avenida de la Playa			
		at Casa Beach, Children's Pool			
		South Casa Beach at Coast Boulevard			
		Whispering Sands Beach at Ravina Street			
		Windansea Beach at Vista de la Playa			
		Windansea Beach at Bonair Street			
		Windansea Beach at Playa del Norte			
		Windansea Beach at Palomar Avenue			
		at Tourmaline Surf Park			
		Pacific Beach at Grand Avenue			
	Tecolote Creek	Entire reach and tributaries	49%	49%	51%
San Diego River	Forrester Creek	lower 1 mile	46%	43%	49%
	San Diego River	lower 6 miles	46%	43%	49%
	Pacific Ocean Shoreline	at San Diego River mouth at Dog Beach	46%	43%	51%
San Diego Bay	Chollas Creek	lower 1.2 miles	41%	41%	43%

(c) Interim WQBEL Compliance Dates

The Responsible Copermittees must achieve the interim WQBELs under Specific Provisions 6.c.(2)(a) and 6.c.(2)(b) by the interim compliance dates given in Table 6.5.

Table 6.5
Interim Compliance Dates to Achieve Interim WQBELs

Watershed Management Area	Water Body	Segment or Area	Interim Compliance Dates: Interim Dry Weather WQBELs	Interim Compliance Dates: Interim Wet Weather WQBELs
South Orange County	Pacific Ocean Shoreline	Cameo Cove at Irvine Cove Drive – Riviera Way	April 4, 2016	April 4, 2021
		at Heisler Park - North		
	Pacific Ocean Shoreline	at Main Laguna Beach	April 4, 2016	April 4, 2021
		Laguna Beach at Ocean Avenue		
		Laguna Beach at Cleo Street		
		Arch Cove at Bluebird Canyon Road		
		Laguna Beach at Dumond Drive		
	Pacific Ocean Shoreline	Laguna Beach at Lagunita Place / Blue Lagoon Place at Aliso Beach	April 4, 2016	April 4, 2021
	Aliso Creek	Entire reach (7.2 miles) and associated tributaries: - Aliso Hills Channel - English Canyon Creek - Dairy Fork Creek - Sulfur Creek - Wood Canyon Creek	April 4, 2018	April 4, 2021
	Aliso Creek Mouth	at mouth	April 4, 2018	April 4, 2021
	Pacific Ocean Shoreline	Aliso Beach at West Street	April 4, 2016	April 4, 2021
		Aliso Beach at Table Rock Drive		
		100 Steps Beach at Pacific Coast Hwy at hospital (9th Avenue)		
		at Salt Creek (large outlet)		
		Salt Creek Beach at Salt Creek service road	April 4, 2017	April 4, 2021
		Salt Creek Beach at Strand Road	April 4, 2017	April 4, 2021

Table 6.5 (Cont'd)
Interim Compliance Dates to Achieve Interim WQBELs

Watershed Management Area	Water Body	Segment or Area	Interim Compliance Dates	
			Interim Dry Weather WQBELs	Interim Wet Weather WQBELs
South Orange County (cont'd)	Pacific Ocean Shoreline	at San Juan Creek	April 4, 2016	April 4, 2021
	San Juan Creek	lower 1 mile	April 4, 2018	April 4, 2021
	San Juan Creek Mouth	at mouth	April 4, 2016	April 4, 2021
	Pacific Ocean Shoreline	at Poche Beach	April 4, 2016	April 4, 2021
		Ole Hanson Beach Club Beach at Pico Drain	April 4, 2016	April 4, 2021
		San Clemente City Beach at El Portal Street Stairs	April 4, 2017	April 4, 2021
		San Clemente City Beach at Mariposa Street		
		San Clemente City Beach at Linda Lane	April 4, 2016	April 4, 2021
		San Clemente City Beach at South Linda Lane	April 4, 2018	April 4, 2021
		San Clemente City Beach at Lifeguard Headquarters	April 4, 2017	April 4, 2021
		under San Clemente Municipal Pier		
		San Clemente City Beach at Trafalgar Canyon (Trafalgar Lane)	April 4, 2018	April 4, 2021
		San Clemente State Beach at Riviera Beach	April 4, 2016	April 4, 2021
		Can Clemente State Beach at Cypress Shores	April 4, 2017	April 4, 2021
San Luis Rey River	Pacific Ocean Shoreline	at San Luis Rey River mouth	April 4, 2017	April 4, 2021
Carlsbad	Pacific Ocean Shoreline	at Moonlight State Beach	April 4, 2016	April 4, 2021
San Dieguito River	Pacific Ocean Shoreline	at San Dieguito Lagoon mouth	April 4, 2016	April 4, 2021

Table 6.5 (Cont'd)
Interim Compliance Dates to Achieve Interim WQBELs

Watershed Management Area	Water Body	Segment or Area	Interim Compliance Dates	
			Interim Dry Weather WQBELs	Interim Wet Weather WQBELs
Penasquitos	Pacific Ocean Shoreline	Torrey Pines State Beach at Del Mar (Anderson Canyon)	April 4, 2016	April 4, 2021
		La Jolla Shores Beach at El Paseo Grande		
		La Jolla Shores Beach at Caminito del Oro		
		La Jolla Shores Beach at Vallecitos		
		La Jolla Shores Beach at Avenida de la Playa		
		at Casa Beach, Children's Pool		
		South Casa Beach at Coast Boulevard		
		Whispering Sands Beach at Ravina Street		
		Windansea Beach at Vista de la Playa		
		Windansea Beach at Bonair Street		
		Windansea Beach at Playa del Norte		
		Windansea Beach at Palomar Avenue		
		at Tourmaline Surf Park		
		Pacific Beach at Grand Avenue		
	Tecolote Creek	Entire reach and tributaries		
San Diego River	Forrester Creek	lower 1 mile	April 4, 2018	April 4, 2021
	San Diego River	lower 6 miles		
	Pacific Ocean Shoreline	at San Diego River mouth at Dog Beach		
San Diego Bay	Chollas Creek	lower 1.2 miles	April 4, 2018	April 4, 2021

d. SPECIFIC MONITORING AND ASSESSMENT REQUIREMENTS

(1) Monitoring and Assessment Requirements for Beaches

(a) Monitoring Stations

(i) The Responsible Copermittees must designate the MS4 outfalls within their jurisdiction discharging to the Pacific Ocean Shoreline segments or areas listed in Table 6.0 as high priority non-storm water MS4 monitoring stations, in accordance with the requirements of Provision D.1 of this Order.

(ii) For the Pacific Ocean Shoreline segments or areas listed in Table 6.0 with MS4 outfalls, the Responsible Copermittees must establish at least one monitoring station within the receiving water.

(b) Monitoring Procedures

(i) The Responsible Copermittees must monitor the effluent of the designated MS4 outfalls within their jurisdiction discharging during dry weather to the Pacific Ocean Shoreline segments or areas listed in Table 6.0 in accordance with the dry weather jurisdictional monitoring requirements of Provision D.1.a.(1)(b) of this Order. Samples required to be submitted to a laboratory for analysis must include analysis for total coliform, fecal coliform, and *Enterococcus* indicator bacteria.

(ii) The Responsible Copermittees must monitor, within the first 24 hours of each storm event,[20] the effluent of the designated MS4 outfalls within their jurisdiction discharging to the Pacific Ocean Shoreline segments or areas listed in Table 6.0 in accordance with the wet weather jurisdictional monitoring requirements of Provision D.1.b.(1)(b) of this Order. Samples required to be submitted to a laboratory for analysis must include analysis for total coliform, fecal coliform, and *Enterococcus* indicator bacteria.

(iii) The Responsible Copermittees must collect samples from the monitoring stations within the receiving water body for each dry weather and wet weather MS4 outfall monitoring event. Samples must be analyzed for total coliform, fecal coliform, and *Enterococcus* indicator bacteria.

(c) Assessment and Reporting Requirements

(i) The Responsible Copermittees must analyze the dry weather and wet weather monitoring data to assess whether the interim and final WQBELs for the Pacific Ocean Shoreline segments or areas listed in Table 6.0 have been achieved.

(ii) The monitoring and assessment results must be submitted as part of the Annual Reports required under Provision F.3.b of this Order.

[20] Wet weather days are defined by the TMDL as storm events of 0.2 inches or greater and the following 72 hours. The Responsible Copermittees may choose to limit their wet weather sampling requirements to storm events of 0.2 inches or greater, or also include storm events of 0.1 inches or greater as defined by the federal regulations [40CFR122.26(d)(2)(iii)(A)(2)].

(2) Monitoring and Assessment Requirements for Creeks and Creek Mouths

(a) Monitoring Stations

(i) The Responsible Copermittees must establish at least one receiving water monitoring station at or near the mouth of the creeks listed in Table 6.0.

(ii) The Responsible Copermittees must establish at least one receiving water monitoring station upstream of the station established for Specific Provision 6.d.(2)(a)(i). At least one monitoring station must be established for each Responsible Copermittee at the most downstream location within its jurisdiction, and one monitoring station at the most upstream location within its jurisdiction.

(iii) The Responsible Copermittees must identify the MS4 outfalls discharging to the segments or areas of the creeks and creek mouths listed in Table 6.0. The Responsible Copermittees must identify the MS4 outfalls that are monitored in accordance with the dry weather jurisdictional monitoring requirements of Provision D.1.a.(1)(b) of this Order and the wet weather jurisdictional monitoring requirements of Provision D.1.b.(1)(a) of this Order.

(b) Monitoring Procedures

(i) The Responsible Copermittees must collect dry weather monitoring samples from the receiving water monitoring stations at least monthly.

(ii) The Responsible Copermittees must collect wet weather monitoring samples from the receiving water monitoring stations within the first 24 hours of each storm event.[21]

(iii) Samples collected from receiving water monitoring stations must be analyzed for total coliform, fecal coliform, and *Enterococcus* indicator bacteria.

(c) Assessment and Reporting Requirements

(i) The Responsible Copermittees must analyze the receiving water monitoring data to assess whether the interim and final receiving water WQBELs for the creeks and creek mouths listed in Table 6.0 have been achieved.

[21] Wet weather days are defined by the TMDL as storm events of 0.2 inches or greater and the following 72 hours. The Responsible Copermittees may choose to limit their wet weather sampling requirements to storm events of 0.2 inches or greater, or also include storm events of 0.1 inches or greater as defined by the federal regulations [40CFR122.26(d)(2)(iii)(A)(2)].

(ii) If the receiving water WQBELs for the creeks and creek mouths listed in Table 6.0 have not been achieved, the Responsible Copermittees must review the MS4 outfall monitoring data to assess whether the interim and final effluent WQBELs have been achieved.

(iii) The Responsible Copermittee must identify and incorporate additional MS4 outfall and receiving water monitoring stations and/or adjust monitoring frequencies to identify sources causing exceedances of the receiving water WQBELs.

(iv) The monitoring and assessment results must be submitted as part of the Annual Reports required under Provision F.3.b of this Order.